



MODEL MS5500

VEHICLE SECURITY SYSTEM

OWNER'S MANUAL

Congratulations on your purchase of the Ungo Security System. This Ungo Security System was designed in the heart of California's high-tech "Silicon Valley" by Ungo Security Corporation, a subsidiary of Clarion Corporation. Since its founding in 1975, Ungo has been recognized as a pioneer and long time industry leader in vehicle security.

Please read this manual thoroughly to familiarize yourself with your system's components and operation. Discuss any questions you might have with your installing dealer.

Record the serial number of your Ungo system and keep all dealer records and receipts. Be sure to discuss the installation with the dealer so that you understand the specifics of the installation in your vehicle. Also, do not forget to complete and mail the Product Warranty Registration Card within 60 days of purchase and insure that the installing dealer has stamped and signed the appropriate section in order to properly register your warranty.

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Note: Certain features described in this manual may require additional parts and/or labor. Also, many features of the Ungo MS5500 security systems have selectable options that must be activated or programmed during the system's installation. These items will be identified in the following sections. Your Authorized Ungo Dealer will be happy to discuss these features with you and help you design your system to meet your needs.

About Your Ungo Security System

Ungo Security Systems are state-of-the-art vehicle protection systems equipped with features designed to:

- Deter** potential intrusions to the vehicle by continually flashing the system LED status indicator while the system is Armed, giving a visual indication to any passer-by that the system is equipped with a security system.
- Detect** intrusions to the vehicle, including impacts to the vehicle's body and glass, and opening of the doors, trunk and hood.
- Alert** those in the vicinity of the vehicle by sounding the system's siren and flashing, parking lights, and honking the horn.
- Inform** the owner when the system has been triggered and specifically which zone was violated. The system will also inform the user of any bad switches or sensors that may be causing the system to function improperly.
- Protect** both you and the contents of your vehicle with features such as panic mode, dome light illumination, and ignition controlled door locking.

Each Ungo MS5500 System comes with:

- **Main Unit** - the "brain" of the system.
- **2 - Three Button Remote Transmitters**
- **125dB Siren** - Water resistant, high output siren that sounds when system is triggered. Also used to provide audible system status information.
- **Logic Sensor II** - Ungo Security's patented sensor that detects both shock and motion.
- **Status LED** - red illuminated indicator that provides system status information.
- **Emergency Override / Valet Switch** - used to override the system in case the Remote Transmitters become lost or stolen. Also used to temporarily disable the system when the vehicle is being serviced or turned over to a parking attendant.

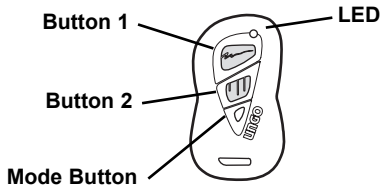
Options and Convenience Features

The advanced design of the Ungo system incorporates a number of optional inputs and outputs allowing you to create a customized security / convenience system by easily accommodating many optional convenience and security features such as:

- | | |
|---|--|
| <input type="checkbox"/> Remote Door Locking | <input type="checkbox"/> Glass Breakage Sensor |
| <input type="checkbox"/> Starter Disable | <input type="checkbox"/> Radar Sensor |
| <input type="checkbox"/> Horn Honk | <input type="checkbox"/> Garage Door Receiver |
| <input type="checkbox"/> Illuminated Entry / Exit | <input type="checkbox"/> Auxiliary Lighting Control |
| <input type="checkbox"/> Remote Window Control | <input type="checkbox"/> Stereo System Valet |
| <input type="checkbox"/> Remote Car Start | <input type="checkbox"/> Remote Head Lamp Control |
| <input type="checkbox"/> Extended Range Antenna | <input type="checkbox"/> Back-up Battery Siren |
| <input type="checkbox"/> Power Trunk / Hatch Release | |

Remote Transmitters

Remote Transmitter Layout



Each MS5500 system comes with 2 multifunction Remote Transmitters used to control nearly all of the system's features.

Each time a transmitter button is pressed, the LED will flash to indicate that a transmission is taking place.

The Remote Transmitters may be used in one of three operating modes: **Ungo Standard Mode**, **Convenience Mode**, and **Driver Door Priority Mode**.

Ungo Standard Mode (default)

The MS5500 system is pre-programmed to operate in the Ungo Standard Mode. For ease of understanding, any references made in this manual to the Remote Transmitter, are assuming that the Transmitter Operating Mode is set to Ungo Standard Mode, unless otherwise stated.

Button 1 Arms and Disarms the system. This Button also locks and unlocks the doors when the system is in Valet Mode.

Button 2 controls the system's Auxiliary Function 1, which is normally used for activating a car's electric trunk release.

When Button 1 and 2 are pressed together, the system will Arm or Disarm *silently* (without chirp confirmation).

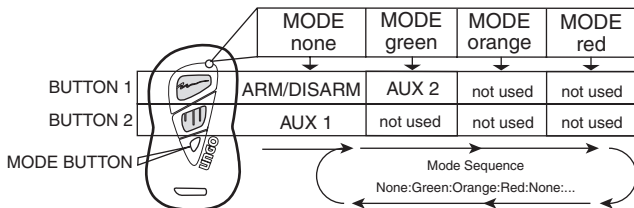
As an option, your installer can set system to *always* arm without chirp confirmation. If this is done, then pressing Buttons 1 and 2 together will Arm or Disarm the system *with* chirp confirmation.

The **Mode Button** will change the function of Buttons 1 and 2 each time it is pressed, allowing Buttons 1 and 2 to control the system's Auxiliary Function Outputs.

Note also that the LED on the transmitter changes color each time the Mode Button is pressed to indicate the current function of Buttons 1 and 2. The LED will stay on for 5 seconds, then turn off, returning Buttons 1 and 2 to their default settings.

It is also possible to set individual Remote Transmitters to arm and disarm the system using any of the Transmitters function Buttons, which is extremely useful when a Transmitter is used to control multiple systems. See **Adding a Remote Transmitter into the System**.

The following diagram illustrates how the Remote Transmitter controls the functions of the system when used in the Ungo Standard Mode:



Convenience Mode

This configuration allows the MS5500 to operate with separate Arm and Disarm buttons for greater convenience and ease of use.

Button 1 Arms the system. This Button also locks the doors when the system is in Valet Mode.

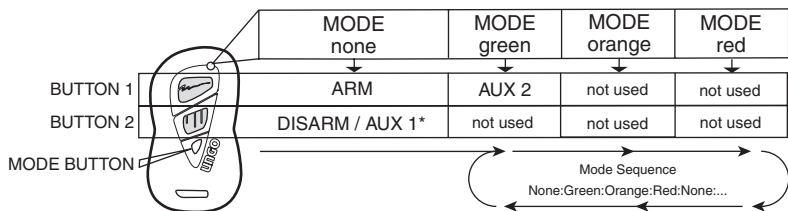
Button 2 Disarms the system. Pressing Button 2 again activates the system's Auxiliary Function 1. This Button also unlocks the doors when the system is in Valet Mode.

If the system is Armed, pressing Button 2 will Disarm the system.

If the system is Disarmed, pressing Button 2 will activate the Auxiliary Function 1.

If the system is in Valet and the doors, pressing Button 2 will unlock the doors.

The following diagram illustrates how the Remote Transmitter controls the functions of the system when used in the Convenience Mode:



*AUX 1 when system is Disarmed

Driver Door Priority Mode*

This configuration adds the security of unlocking only the driver's door when the system is Disarmed. Pressing the Disarm button again will unlock all remaining doors.

Button 1 Arms the system. This Button also locks the doors when the system is in Valet Mode.

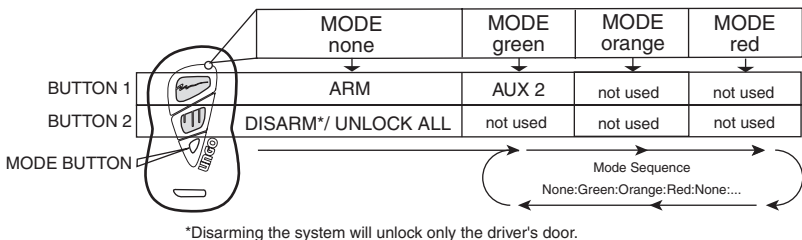
Button 2 Disarms the system and at the same time activates Auxiliary Function 1 (which unlocks the driver's door). This Button also unlocks the doors when the system is in Valet Mode.

If the system is Armed, pressing Button 2 will Disarm the system and unlock the driver's door only.

If the system is Disarmed, pressing Button 2 within 10 seconds after disarming will unlock all remaining doors.

If the system is in Valet and the doors are locked, pressing Button 2 will unlock the driver's door. Pressing Button 2 again within 10 seconds after disarming will unlock all remaining doors.

The following diagram illustrates how the Remote Transmitter controls the functions of the system when used in the Driver Door Priority Mode:

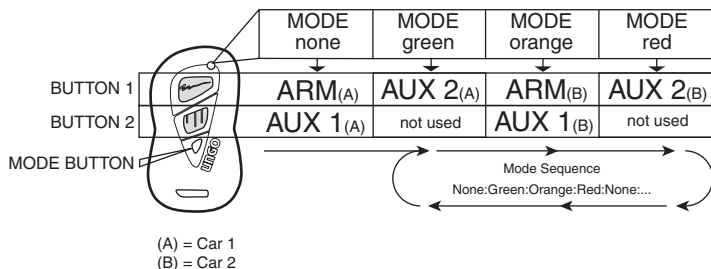


*Extra parts and/or labor may be required to properly utilize this mode. See your Authorized Ungo Dealer for details.

Two Car Operation

If you want to control two or more Ungo Security systems by a single Remote Transmitter, the unused functions of the Remote Transmitter can be set up by your dealer to operate another Ungo Security system, giving you the convenience of operating multiple vehicles from a single Remote Transmitter.

When set for two car operation, the Remote Transmitters will function as in the example below:



For more information about Two Car operation, see your Authorized Ungo Dealer.

Adding a New Transmitter into the System

The MS5500 has the ability to recognize up to 20 individual Remote Transmitters. If the vehicle is used by multiple drivers, each can have their own Remote Transmitter.

To add Remote Transmitters:

1. Turn on the ignition.
2. Press and hold the Override switch.

- The status LED will turn on red.

3. Within 5 seconds:

Continue holding the Override switch and Press Transmitter Button 1*
For remote arming **with** chirp confirmation.

--- or ---

Release the Override switch and Press Transmitter Button 1*
For remote arming **without** chirp confirmation.

- The status LED will flash once quickly to confirm that the new Remote Transmitter has been added.

4. Turn off the ignition.

* The Button that is pressed will be the Arm/Disarm Button on that Remote Transmitter. You may program *any* of the Transmitter's function buttons to arm and disarm the system at this point.

Deleting Transmitters (Adding a Remote Transmitter *and* Erasing All Other Remote Transmitters From the System)

1. Turn on the ignition.
2. Press and hold the Override switch.

- The status LED will turn on red.

Continue to hold the Override switch.

- After 5 seconds, the status LED will flash 4 times, then turn on red again.

3. Within 5 seconds:

Continue holding the Override switch and Press Transmitter Button 1*
For remote arming **with** chirp confirmation.

--- or ---

Release the Override switch and Press Transmitter Button 1*
For remote arming **without** chirp confirmation.

- The status LED will flash once quickly to confirm that the new Remote Transmitter has been added.

4. Turn off the ignition.

* The Button that is pressed will be the Arm/Disarm Button on that Remote Transmitter. You may program *any* of the Transmitter's function buttons to arm and disarm the system at this point.

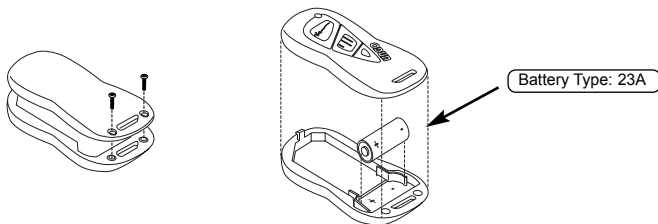
Battery Replacement

Your Ungo Remote Transmitter uses a 12 volt alkaline battery, which will need to be replaced from time to time. Under normal conditions, the battery should last for up to a year before it needs replacement.

When your Remote Transmitter's battery is in need of replacement, you will notice a decrease in your system's operating range or a decrease in the brightness of the Transmitter's LED indicator.

To change the battery, remove the 2 screws at the back of the Transmitter and carefully separate the top and bottom halves of the Transmitter case.

Insert the new battery, making sure that the positive and negative terminals are positioned correctly and replace the cover.



Basic Features

Remote Arming

When Armed, the system monitors and protects 5 independent areas, or **zones**, including the ignition switch, doors, hood/trunk, Logic Sensor II, and an optional sensor.

To Arm the System:

1. Turn off the ignition.
 2. Press Button 1.
 - The siren will chirp once.*
 - The doors will lock.
 - The parking lights will flash once.
 - The LED will turn on red, indicating the ignition, doors, hood and trunk inputs are activated.
- * The siren chirp(s) during Arming will alert you the condition of the system and vehicle when the system is armed.
- | | | |
|--------------|---|------------------------------------|
| 1 chirp | = | normal arming |
| 1 + 3 chirps | = | Logic Sensor II sensitivity is off |
| 1 + 4 chirps | = | door, hood, or trunk open |

During Arming, if the system detects a bad sensor or an open zone, the system will ignore that input, but keep all other areas protected.

3. After 20 seconds:
 - The LED will begin blinking, indicating that the sensor inputs are activated.

While the system is **Armed**, the system will trigger if:

- The ignition key is turned on.
- The doors are opened.
- The Logic Sensor II detects an impact to the vehicle or the motion of the car being raised.
- The hood or trunk is opened.
- A connected optional sensor is disturbed.

When triggered, the siren will sound, the horn will honk, and the parking lights will flash. If the system is triggered by the ignition, doors, hood, or trunk, the system will alarm for 40 seconds. If triggered by the sensor inputs, the system will alarm for 20 seconds.

If the same input triggers the system 3 times during a single arming cycle, the system will bypass that input, keeping the other zones protected, until the next time the system is armed.

If the Logic Sensor II detects a light impact to the car or a connected optional sensor triggers the system's Warn Away input, the siren will sound a chirp to warn away the potential intruder.

Remote Disarming

To Disarm the System:

Press Button 1.

- The siren will chirp twice.*
- The doors will unlock.
- The parking lights will flash twice.
- The dome light will turn on.
- The LED will turn off.

* The siren chirps during disarming will alert you if the system had been triggered while armed.

2 chirps	=	normal disarming
1 long chirp	=	Tamper Alert - system was triggered

Tamper Alert

On Disarming, if the system responds with one long chirp, indicating the system was triggered, the LED will flash for 60 seconds to indicate the zone that triggered the system. If the **Audible Tamper Alert Report** feature is turned on during installation, the siren will chirp to indicate the triggered zone.

LED Flashes (60 seconds):

1 flash	=	door
2 flashes	=	Logic Sensor II
3 flashes	=	optional sensor
4 flashes	=	trunk

example: flash-flash-pause-flash-flash-pause = Logic Sensor

Siren Chirps (once only)

1 chirp	=	door
2 chirps	=	Logic Sensor II
3 chirps	=	optional sensor
4 chirps	=	trunk

Silent Arming / Disarming

Each Remote Transmitters can be individually set to Arm and Disarm the system with or without chirp confirmation at the time they are programmed into the system (see **Adding a New Transmitter into the System**).

To temporarily cancel the Arming and Disarming confirmation chirps, you can Arm or Disarm the system by pressing Buttons 1 and 2 *together*.

Note: The confirmation chirps will only be cancelled if the system status is normal. The chirp indications for Tamper Alert and the open zone warning will not be cancelled when the system is Armed or Disarmed silently .

Arming Mode Selection

Your system can be set in one of the following Arming Modes:

- Passive (automatic) Arming *with* chirp confirmation
- Active Arming (by Remote Only)
- Passive (automatic) Arming *without* chirp confirmation

To set the Arming Mode:

1. Turn the ignition on.
2. Within 4 seconds, press Buttons 1 and 2 together.

First push:	one chirp	=	Passive Arming with chirp
Second push:	two chirps	=	Active Arming
Third push:	three chirps	=	Passive without chirp
3. Turn the ignition off to save your selection.

Passive Arming

When the **Arming Mode** has been set for *Passive Arming*, the system arms itself automatically, each time the ignition is turned off and all of the doors, hood and trunk are closed.

To start the Passive Arming Process:

1. Turn off the ignition.*
 - The status LED will begin to flash quickly.
2. Open the door and exit the vehicle.
 - Once all doors are closed and the dome light is turned off, the LED will turn off.
3. After 20 seconds,
 - The siren will chirp.
 - The parking lights will flash.
 - The doors will lock.**
 - The status LED will flash red, indicating the system is armed.
4. The system is now armed.

* The ignition must have been on for *at least 4 seconds* before the Passive Arming sequence will begin.

** If the Passive Locking feature is selected.

To temporarily disable Passive Arming, you can turn the ignition key on then off, within 4 seconds. The status LED will stop flashing, and the system will not passively arm until the next time the key is on for more than 4 seconds. This feature is useful for turning off passive arming when refueling or washing your car or if you want to sit in your car and do not want the system to arm.

Panic Mode

Allows you to instantly trigger the alarm in an emergency situation by the Remote Transmitter.

To enter Panic Mode:

1. Press and hold Button 1 for 2 seconds.
 - The system will trigger.
2. Press Button 1 again to stop Panic Mode.*

If Panic Mode is not stopped by the Remote, it will automatically time out after 40 seconds, and the system will return to its prior Armed/Disarmed state.

*In Convenience Mode and Driver Door Priority Mode, Press Button 2 to stop Panic Mode.

Emergency Override

In case your Remote Transmitter becomes inoperable, or it is lost or stolen, you can still enter and drive your car by using the following procedure. Be sure that before you attempt this procedure you have your ignition key ready and that you know the location of the override switch.

To override the system:

1. Unlock the door using the key.
2. Enter the vehicle.
 - Because the system is armed, the system will trigger and the siren will be sounding.
3. Turn ignition key on.
4. Press and hold the override switch.
 - The system will disarm.
5. You can now start and drive the car.

Note: During installation, your installer can program the system to give a 10 second entry delay when the system Arms passively. When the door is opened while the system is Armed, the siren will give a series of warning chirps for 10 seconds before sounding, giving you time to perform the emergency override procedure.

Automatic System Rearming

This feature, which can be turned on during the installation, insures the security of the system by protecting your car in case of an accidental disarm.

If your system becomes disarmed due to an accidental press of the Disarm Button, the system will automatically rearm if no other activity is detected within one minute.

One minute after Remote Disarming, the system will alert you with a 10 second series of chirps, then arm. (If the Passive Door Locking feature is selected during the installation, the system will also relock the doors.)

Any of the following will cancel Automatic System Rearming:

- Turn on the ignition.
- Open the Trunk or Hood.
- Activate Auxiliary Function 1 or 2.

Automatic System Rearming is independent of Passive Arming and only takes place if the system was Armed (actively or passively) for at least 20 seconds and then Disarmed by the Remote Transmitter.

Full Time System Diagnostics

The system continuously monitors all protected zones, even when it is not armed, and warns you if it detects a problem when you turn off the ignition.

1. Turn off the ignition.
2. If the siren chirps twice, the system has detected a problem.*
3. The status LED will flash to indicate the zone where the problem has been detected.

1 flash	=	door
2 flashes	=	Logic Sensor II
3 flashes	=	optional sensor
4 flashes	=	hood / trunk

* The system must see the zone open or active for at least 20 seconds before the zone is determined to be defective. This way, opening the car door before turning off the ignition will not cause the siren to emit the warning chirps.

Other Features

Valet Mode

Allows you to temporarily disable the security system when the car is being serviced or turned over to a parking attendant.

To turn Valet Mode on or off:

1. Turn on the ignition.
2. Press and hold the override switch.
3. While holding the override switch, turn off the ignition.
 - The siren will chirp **once** to indicate you have turned Valet Mode **on**.
 - The siren will chirp **twice** to indicate you have turned Valet Mode **off**.
4. Release the override switch.

While Valet Mode is on, you can continue to lock and unlock your doors with the Remote Transmitters, as well as operate the Auxiliary Functions.

For added protection, when the doors are locked by the Remote Transmitter, the system's Starter Disable circuit will activate and the LED will emit double flashes until the system is unlocked by the Remote.

If the Remote Transmitter is lost, stolen, or becomes inoperable while the car is locked in Valet Mode, you can use the **Emergency Override** procedure to deactivate the Starter Disable circuit.

Ignition Controlled Door Locking

For added convenience and safety, this feature automatically locks your car's doors 10 seconds after the ignition key is turned on.

To prevent you from accidentally locking your keys inside the car:

- The system will not automatically lock the doors if a door is open when the ignition key is turned on.
- The system will not automatically lock the doors if a door is opened during the first 10 seconds after the ignition key is turned on.

Ignition Controlled Door Unlocking*

For added convenience, this feature automatically unlocks your car's doors after the ignition key is turned off.

*For personal safety reasons, this feature can be turned off by your installer.

Dome Light Control

For increased safety and convenience, the system can be set, during the installation, to automatically turn on the dome light when you Disarm the system and when you turn off the ignition.

Illuminated Entry. The dome light will turn on for 20 seconds when the system is disarmed (or unlocked in Valet Mode) using the Remote Transmitter.

Illuminated Exit*. If the ignition key has been on for at least 10 seconds, the dome light will turn on for 20 seconds when you turn off the ignition.

*This feature may be turned off by your installer if desired.

Auxiliary Function Outputs

The system is equipped with two Auxiliary Function outputs that can be used to control a variety of additional features including, electric trunk release, remote car starter, power windows, power sunroof, auxiliary lighting, stereo system valet, garage door receiver, etc.

Auxiliary Function 1 - momentary

Normally, this function is used to activate a power trunk release.

To operate Aux. 1, press Button 2.

This function will operate regardless of whether the system is armed or disarmed and will stay active for as long as Button 2 is held.

Logic Sensor Defeat. When your system is used with an optional Remote Car Starter (Ungo model SAA4295), either Auxiliary Function 1 or 2 can be selected to remotely start your car's engine. With the MS5500's Logic Sensor Defeat enabled, when the Auxiliary Function is used to activate the Remote Car Starter while the system is armed, the Logic Sensor II and optional sensor inputs will be ignored. This will allow the alarm to continue protecting the door and hood/trunk inputs, but prevent it from triggering due to the motion of the engine starting and running. *This feature must be enabled by your installer at the time of installation.*

Auxiliary Function 2 - momentary / latched / timed (resets with arm and disarm)

This Auxiliary Function has three selectable operating modes which can be programmed by your installer to allow custom operation of your vehicle and its accessories.

Momentary - the system will provide an output for as long as the Transmitter button is held.

Latched - the system will provide an output that turns on when the transmitter button is pressed and turns off when the transmitter button is pressed again.

Insider Tip: *The Latched mode works great for activating auxiliary lighting such as neon or off road lights. It can also be used to activate your stereo system so that it be turned on without having the key in the ignition. In either case the auxiliary function will turn off when the system is armed or disarmed so that you do not forget to turn it off and drain your vehicle's battery.*

Timed - the system will provide an output that turns on for 30 seconds each time the transmitter button is pressed. If the button is pressed again during the 30 seconds, the output will turn off.

Insider Tip: *The Timed mode is especially useful to turn on the vehicle's head lights to light the path to your door at night.*

To operate Aux. 2, press the Mode Button, then Button 1.

When the Latched or Timed outputs are activated:

- **Arming** the system will turn **off** the Aux. 2 output if it was turned **on** while the system was disarmed.
- **Disarming** the system will turn **off** the Aux. 2 output if it was turned **on** while the system was armed.

Trunk Bypass*

If an Auxiliary Function is being used to remotely open your car's trunk, your installer can program the system to allow you to remotely access the trunk while the system is armed, without triggering the alarm. This will allow you to load or retrieve packages from the trunk without having to first disarm the alarm.

When the trunk is opened using the remote transmitter, the trunk input, and Logic Sensor will be ignored until the trunk is closed. *This feature must be enabled by your installer at the time of installation.*

***To utilize this feature, the alarm's trunk input must be connected to a trunk pinswitch.** If your car is not equipped with a trunk pinswitch, one can be installed by your Ungo dealer for an additional charge.

Remote Logic Sensor II Bypass

In case of extreme weather conditions such as high winds, the Logic Sensor II can be temporarily bypassed from the Remote Transmitter while the system is armed to prevent the system from false alarming.

To Bypass the Logic Sensor II:

1. With the system armed, press the Mode Button on the Remote Transmitter 3 times, holding down on the third press.
2. Continue holding the Mode Button.
 - After 5 seconds, the LED on the Remote Transmitter will begin to flash rapidly.
 - The siren will chirp 3 times, indicating the Logic Sensor II has been bypassed.
3. Release the Mode Button.
 - The Logic Sensor II will remain bypassed until the next time the system is armed.

Remote Car Starter

When an optional Remote Car Starter (Ungo model number **SAA4295**) is installed into your car, the Remote Transmitter can be used to remotely start and run your car engine to warm-up the engine, as well as activate the heating / air conditioning system.

With the Dedicated Remote Start feature designed into the MS5500, the Remote Car Starter can be used to start your engine even while the system is armed. When the Remote Car Starter is activated by an Auxiliary Function, the system will receive a signal to temporarily ignore the Logic Sensor II and the optional sensor inputs, so that the system will not trigger due to the action of the car starting or the vibration of the engine. The doors, hood, and trunk, however, remain protected.

When the Remote Car Starter is activated, the siren will emit 5 quick chirps, indicating the ignition trigger and sensor triggers are being temporarily disabled.

Garage Door Receiver

When an optional Garage Door Receiver (Ungo model number **SAA5999**) is used with your system, the Remote Transmitters can be set to control almost any automatic garage door opener.

By adding this feature to your system, you not only add the convenience of being able to open your garage door and activate your car security system by the same remote, but you also add the protection of Ungo's Varicode 2 anti-code grabbing technology to your automatic garage door opener.

As an added benefit, by not keeping a garage door opener in your car, your garage is protected from break-in by a thief who might break into your car to steal your garage door opener.

Additional Remote Transmitters

Additional Remote Transmitters for your MS5500 are available from your Authorized Ungo dealer as replacement part **SAA3716**.

Reference Chart

You can use this chart to quickly identify and interpret your system's chirp indications and LED flashes.

Output	When	Status
1 chirp	arming	normal arming
1 + 3 chirps	arming	Logic Sensor II sensitivity is off
1 + 4 chirps	arming	door, hood, or trunk is open
Double chirps	while armed	system triggered (Passive Arming Entry Delay)
2 quick chirps	arming	Valet Mode is on
LED double flashes	Valet Mode	Starter Defeat Activated
2 chirps	disarming	normal disarming
1 long chirp	disarming	Tamper Alert - system was triggered
no chirps	after Tamper Alert	ignition
1 chirp	after Tamper Alert	door
2 chirps	after Tamper Alert	Logic Sensor II
3 chirps	after Tamper Alert	optional sensor
4 chirps	after Tamper Alert	hood or trunk
no LED flashes	after Tamper Alert	ignition
1 LED flash	after Tamper Alert	door
2 LED flashes	after Tamper Alert	Logic Sensor II
3 LED flashes	after Tamper Alert	optional sensor
4 LED flashes	after Tamper Alert	hood or trunk
1 chirp	while armed	Warn Away
5 quick chirps	while armed	Dedicated Remote Start Mode activated
3 quick chirps	while armed	Logic Sensor II Defeat activated
Double chirps (for 10 seconds)	1 minute after disarming	Automatic Rearming
LED flashing quickly	ignition key off	Passive Arming sequence started
Two chirps	ignition key off	Full Time System Diagnostics
1 LED flash	after Full Time Sys. Diag.	door
2 LED flashes	after Full Time Sys. Diag.	Logic Sensor II
3 LED flashes	after Full Time Sys. Diag.	optional sensor
4 LED flashes	after Full Time Sys. Diag.	hood or trunk

Technical Data

Specifications

Main Unit

Voltage: 12v, negative ground

Current Consumption: <5mA

Temperature Range: -40°F to +170°F

-40°C to +77°C

Auxiliary Output Capability: 500mA

Internal Relays: 12/28A

Transmitter

Current Consumption: <.002mA, standby

Battery Type: miniature 12v, type 23A

FCC ID:

MP62VUUUNGO7000-2

HP92VUUUNGO603/03

THIS DEVICE COMPLIES WITH FCC RULES PART 15.

OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:

(1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE THAT MAY BE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

Ungo Security Corporation
Gardena, CA
USA

Warranty Information

Model No.: MS5500

Serial No.: _____

Dealer Name: _____

Address: _____

Purchase Date: _____

Warranty Information

1. Ungo Security Corporation of Gardena, California ("Ungo Security") warrants this Ungo System to be free from defects in materials and workmanship and to comply with Ungo Security's applicable printed specifications.

2. Ungo Security Systems carry a limited lifetime warranty on the Main unit (system brain) and transmitters. The warranty is limited to Ungo Security Systems that have been installed by an approved Ungo dealer and is extended to the Original Purchaser ("Owner") and to the original vehicle in which it was installed only, and is not transferable to any subsequent owner or owners of the product(s).

All other products (including those products of other manufacturers which are supplied by Ungo Security as a part of, or an accessory to, an Ungo Security-manufactured product) are warranted by Ungo Security for a period of one year from the date of sale to the Owner. For specific identification of such products contact Ungo Security.

3. This warranty shall not cover: (I) any damage caused by Owner's negligence or misuse of any kind, or any damage due to causes unrelated to Ungo Security's manufacturing, including, but not limited to improper servicing or repair by someone other than Ungo Security or an authorized service facility; (II) alterations or modifications to the Ungo System other than the addition of an authorized accessory; or (III) improper installation or removal from the vehicle contrary to Ungo Security's instructions.

4. Obligations of Ungo Security. In the event the Owner's Ungo System does not comply with this warranty, it must be returned to Ungo Security as specified below. Ungo Security will repair or replace it with a new or reworked unit, within thirty (30) days of receipt and acceptance of such defective unit, and without cost to Owner.

5. To make a claim under the warranty. Owner must: (I) provide Ungo Security with written notice that the Ungo System does not comply with the warranty within thirty (30) days from the date of the Owner's discovery of the defect and (II) furnish proof of purchase and purchase date (this requirement is satisfied if Ungo Security has a completed warranty registration card on file).

6. Owner obligations. To obtain Warranty Service, Owner must at Owner's expense: (I) have the Ungo System removed from the vehicle by an authorized Ungo Security dealer, (II) package the unit in a reasonable manner to prevent damage to the unit during shipment; and (III) ship the unit, freight prepaid, to Ungo Security's factory or other authorized repair facility.

7. Repair facility locations. To obtain the name, address and phone number of the nearest Authorized Ungo Repair Facility, Owners may contact Ungo Security at 310-327-9100.

8. The Owner of Ungo Systems in California has the right to have the product serviced or repaired during the warranty period. The warranty period will be extended for the number of full days that the product has been out of the Owner's

hands for warranty repairs. If a defect exists within the warranty period, the warranty will not expire until the defect has been fixed. The warranty period will also be extended if the repair has not been performed due to delays caused by circumstances beyond the control of the Owner, or if the warranty repairs did not remedy the defect and the Owner notifies Ungo Security or the seller of the failure of the repairs within sixty (60) days after they were completed. If, after a reasonable number of attempts, the defect has not been fixed the Owner may return this product for replacement or a refund, subject in either case, to a deduction of a reasonable charge for usage. The time extension does not effect the protection or remedies the Owner has under other laws.

9. Exclusions from liability.

(A) In no event shall Ungo Security be liable for any loss or damages beyond the original purchase price of the Ungo System, and Ungo Security specifically excludes any and all incidental and consequential damages, whether resulting from breach of warranty or contract, negligence or other conduct in connection with any sale, use, servicing or repair of a unit. (Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you.)

(B) There are no warranties, express, statutory or implied, which extend beyond that which is described herein, and in particular, all implied warranties of merchantability and fitness for a particular purpose, and all warranties of title and against encumbrances, are expressly disclaimed, limited and excluded as permitted by law; but in no event shall any implied warranty, whether of merchantability of fitness for a particular purpose or otherwise, have a duration exceeding that of the express warranty made herein. (Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.)

(C) No agent, officer, employee or representative of Ungo Security, or any other person, has authority to make any representations, promises or warranties respecting Ungo Systems and their authorized accessories.

(D) Owner has the right to bring any action at law or in equity to resolve disputes concerning, or to enforce, the provisions of this warranty. No action at law or in equity may be brought against Ungo Security for breach of warranty or contract or based on negligence of other conduct more than three (3) years from the date the cause of action has occurred.

(E) This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

(F) The remedies extended herein are the sole and exclusive remedies available to Owners of Ungo Systems.

(G) Under no circumstances should this warranty, or the products covered by it, be construed as an insurance policy against loss.

Ungo Security Corporation

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Gardena, CA 90247
800-Go-Clarion
www.clarionmultimedia.com