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The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

12/02 MO_REC-11+/443



REC-11+ REMOTE RECEIVER UNIT

OWNER'S MANUAL

This product is designed for professional installation only!

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Transmitter Functions

“LOCK” BUTTON

Pressing the LOCK button will lock all of the doors and engage the optional starter interrupt; when held operates “Panic”.

RED OR GREEN LIGHT

Illuminates whenever any transmitter button is pressed (“car 1/2” switch on rear of transmitter changes the light’s Red or Green color).

“II” BUTTON

Pressing the II button for 2 seconds will activate remote trunk release (vehicle must be equipped with power trunk release), and this operation also unlocks the doors.

“UNLOCK” BUTTON

Pressing the UNLOCK button will unlock all of the doors and disengage the starter interrupt circuit. Or, if the system is thusly configured, pressing the UNLOCK button once unlocks only the driver's door and pressing a second time will unlock all of the doors. Press and hold for optional “Panic”.

“III” BUTTON

Pressing the III button for two seconds can be used to activate the 3rd Channel Output. This Button may also be configured to activate optional “Panic”.

The “Car 1-2” switch, on the rear of transmitter, allows independent two car operation, if programmed. Otherwise, the transmitter operates a single REC-11+ system regardless of this switch’s setting.



Step 4 Within 10 seconds press the LOCK button on the first transmitter to be programmed.

The piezo or horn will sound then chirp once to indicate the transmitter is learned by the system. It is only necessary to press the LOCK button.

Step 5 Repeat Step 5 within 10 seconds for each additional transmitter.

As each transmitter is learned, the piezo or horn will sound, which is then followed by chips indicating the number of the transmitters learned (i.e.- 2 chirps, then 3, then 4).

The system will exit the Transmitter Programming Mode when the ignition switch is turned "off"; after 18 seconds of not receiving a transmitter signal; or upon learning four transmitters. The exiting of Transmitter Programming Mode is indicated by the piezo or horn sounding twice.

Also remember that after programming transmitters, that the Automatic Transmitter Verification feature (which shows the number of operating transmitters) will change. For 48 hours after transmitters have been programmed the Status Light will flash the number of operating transmitters for 90 seconds instead of the otherwise normal 10 seconds.

Programming Transmitters

The REC-11+ comes with two pre-programmed transmitters, and up to 4 total can operate it. To use an additional or replacement transmitter, it must first be added to the control module's memory. Program transmitters by following these steps:

Step 1 Have all the transmitters that are to operate the system at hand. Any time a transmitter is programmed into the system, all existing operating transmitters are automatically deleted.

Step 2 Turn the ignition switch "on", and within 5 seconds press the Valet Switch 5 times.
The piezo or horn will sound briefly.

Step 3 Enter the Secret Override Code- if the default setting, press the Valet Switch once.
The system will respond by briefly sounding the piezo or horn, followed by 2 chirps.

***Important: If a customized Secret Override Code has been programmed, the 2 chirps will not occur, and at this point you must now enter your secret code.**

Follow steps 4a & 4b only if you have added a Secret Override Code.

4a) Press the Valet Switch equal to the first digit in your secret code.

The piezo or horn will sound 1 long chirp followed by 1 short chirp. If only a first digit has been programmed, 2 chirps will occur, and you may proceed directly to Step 4.

4b) Press the Valet Switch equal to the second digit in your secret code.

The piezo or horn will sound 1 long chirp followed by 2 short chirps.

Introduction

The REC-11+ is a fully-featured Remote Keyless Entry System with optional Starter Disable capability, and is designed by Omega Research and Development, a leader in vehicle security and convenience systems since 1970. The REC-11+ has many programmable features, which can be configured by the installer or the user, and thus can enhance or change the system's operation. The programmable features, and the method used to configure them, are described in this booklet so that the system may be customized to suit the user's needs. These instructions will first describe basic operations of the system, as configured with the factory default settings of the programmable features. Programming transmitters, or coding them into your system to operate it, is also explained.

Three main system components are used to operate your system:

The Transmitter: Each system comes with two pre-learned controllers, which are actually radio transmitters. As many as 4 different transmitters can operate the system. Every transmitter has embedded within its signal a unique, security code, which changes with each use. The transmitter has four buttons: a "**Lock**" button; an "**Unlock**" button; a "**I**" button which operates an additional output; and a "**II**" which can operate another additional output, or be configured to operate the optional remote "Panic" feature.

On back of the transmitter is a "Car 1" and "Car 2" switch to operate multiple systems. This switch only operates if the system is programmed for it to do so.

The Valet/Override Switch: This switch can be used to temporarily turn “off” certain automatic locking, anti-carjacking, and optional starter interrupt operations of the system, should they be programmed to operate, by placing the system into “Valet Mode”. If the optional starter interrupt is installed, the Valet/Override Switch can also be used, in conjunction with the vehicle’s ignition key, to perform a “System Override”, allowing you to start the engine, should the transmitter not be available. The Valet/Override Switch is also used to program features and transmitters.

The Status Light: This light shows the status of the system at a glance, and its presence offers a visual deterrent to break-ins and theft. The Status Light’s operation is described on pages 7-8.

The Valet / Override Switch

The **Valet/Override Switch** can be used to place the system into **Valet Mode**, which is used to stop or interrupt any automatic system functions which may be programmed to operate. The Valet/Override Switch, in conjunction with your ignition key, also permits **System Override**, which allows starting the vehicle if the optional starter interrupt is installed, and the transmitter becomes lost or damaged.

Valet Mode: You may activate the Valet Mode at any time by pressing and holding the Valet/Override Switch for 2 seconds, unless the doors have been locked by the transmitter

#	Feature	Default Setting	TX button for Default
1	Secret Override Code : Default	1&0 Switch Press	(see previous page 15)
2	Doors Automatically Lock 90 seconds after the Ignition is turned “Off” : Default	OFF	(UNLOCK)
3	Doors Automatically Relock 90 Seconds after Remotely Unlocking : Default	OFF	(UNLOCK)
4	Doors Lock with Ignition “On” : Default	ON	(LOCK)
5	Ignition “Off” Unlock #1 : Default	ON	(LOCK)
6	Ignition “Off” Unlock #2 : Default	ON	(LOCK)
7	Activating Trunk Release also Unlocks Doors: Default	ON	(LOCK)
8	.8 or 3 Second Doorlock Pulse: Default	.8 Second	(LOCK)
9	Double Unlock Pulse : Default	OFF	(UNLOCK)
10	Audible Confirmation of Received Transmitter Signal : Default	ON	(LOCK)
11	Automatic Starter Disable After Ignition “Off” : Default	OFF	(UNLOCK)
12	Automatic Starter Disable After Unlocking: Default	OFF	(UNLOCK)
13	Ignition Activated Anti-Carjacking : Default	OFF	(UNLOCK)
14	Transmitter Activated Anti-Carjacking : Default	OFF	(UNLOCK)
15	30 Second Parking Lights upon Remote Unlock : Default	ON	(LOCK)
16	“Panic” / 3rd Channel From Button III : Default	3rd Channel	(UNLOCK)
17	1 Car Operation or 2 Car Operation : Default:	1 Car Operation	(LOCK)

permitting connection of the system to vehicle's having special power doorlocking systems.

How to Program Features

Step 1 Turn off the ignition, and within 5 seconds press the Valet Switch 5 times.

The system will respond by sounding the piezo or horn for a short period.

Step 2 Enter the Secret Override Code- if the default setting, press the Valet Switch once.

The system will respond one long, then two short chirps.

Step 3 Within 10 seconds access the desired feature by pressing the Valet Switch the same number of times as the feature number.

The system will acknowledge the entry by chirping the same number of times.

Step 4 Within 10 seconds, press the transmitter's LOCK button to turn features on, or press the UNLOCK button to turn features off (see list on the next page).

The system will acknowledge turning the feature "on" by chirping once, or "off" by chirping twice.

Repeat Steps 3 and 4 for each remaining feature to be programmed. If 10 seconds of no programming activity expires (not pressing the LOCK or UNLOCK or selecting another feature) the system will automatically exit the programming mode, as indicated by sounding a long chirp.

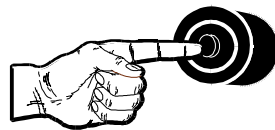
(in which case the Status Indicator will be flashing slowly). When the system enters Valet Mode, the Status Light will illuminate solid steady Red; if the REC-11+ is installed with audible confirmation, the system will also chirp twice when it enters Valet Mode. Remember to check the Status Light- the system may be placed into Valet Mode if it is not lighted or flashing fast; if the Status Light is on steady, the system is already in Valet Mode, and if it's flashing slowly a System Override must first be performed (see next page).

While the system is in the Valet Mode, the Status Light will remain solid Red (not flashing) at all times, and if the audible confirmation is connected every time the ignition switch is turned "off", the system will chirp once as a reminder of this condition. Also, the transmitter will operate normally while the system is in Valet Mode, i.e., it will still lock and unlock the doors, and the transmitter's II and III Buttons will still operate - but the optional Starter Disable will not operate, and any programmed automatic functions are suspended.

To exit Valet Mode simply press and release the Valet Switch at any time; the Status Light will change from being on solid steady Red to being off.

To Enter Valet Mode:

Check the Status Light- it may be off or flashing fast



Press the Valet Switch for 2 Seconds

System Override:

The Status Light will be flashing slow - - - - - and then go out



Turn the ignition "on"



Within 5 seconds, press the
Valet Switch for 2 seconds

Important: If a Secret Override Code has been programmed you must enter your secret code to perform the System Override; see pages 14-15.

System Override: If the last system operation was locking the doors by the transmitter, a System Override is required before then placing the system into Valet Mode, or starting the engine if the optional Starter Disable is installed. To obtain a System Override:

Step 1 Enter the vehicle normally.

Step 2 Using your key, turn the ignition "on".

Step 3 Within 5 seconds, press the Valet Switch for 2 seconds*. The Status Light will stop flashing slowly, and the audible confirmation, if connected, will be one long and two short chirps.

- ✓ Manually overriding the starter interrupt circuit, should the transmitter not be available.
- ✓ The programming of transmitters so that they can operate the system.
- ✓ Changing any of the programmable features.

Basically, these system operations at some point require "entering the Secret Override Code" with the Valet Switch. The as-received default would be only one press, while a user-customized Secret Override Code could be a single series of multiple presses (2 to 9), or even two stages of multiple Valet Switch presses (maximum each stage is 9).

When using a customized Secret Override Code: When the Valet Switch entry is made, after a short delay the system will either respond with:

- The piezo or horn having 1 long and 2 short chirps, in which case the entry was correct. The system will then show the proper next operation, such as overriding Anti-Carjacking, overriding the starter interrupt, or continuing features or transmitter programming.
- Or the system has 1 long and 1 short chirp, which means that either the entry was incorrect (two more chirps soon follow), or, that an additional stage 2 entry will also be required.

Programming a customized Selectable Override Code: In the "How to Program Features" instructions on the next page, at Step 3 press the Valet Switch one time for "feature #1". Then enter your desired stage one code by pressing the transmitter LOCK button 2 to 9 times; each press is acknowledged by a chirp. After the series of LOCK presses, after a pause the system will chirp the total number that was entered. Then, if a second stage is desired, enter it by pressing the UNLOCK button in the same fashion, and waiting for the system to chirp the total entered. Once the system is removed from Features Programming Mode, the New customized Secret Override Code will replace the default "1 Press" code.

Installation Features- Two other programmable features, **.8 or 3 Second Doorlock Pulse** (feature #8) and **Double Unlock Pulse** (feature #9), are for the installer's use,

the driver's door first, all of the doors will unlock when the remote trunk release is utilized. This is programmable feature #7.

Audible Confirmation- This programmable feature (#10) is defaulted on, but can turn off the system's audible chirps that occur when the transmitter is used. Other audible outputs, such those associated with programming or Anti-Carjacking features, are not affected.

30 Seconds Parking Lights upon Unlocking- This feature, defaulted on, turns on the parking and interior lights for 30 seconds after the transmitter is used to unlock the doors. If this feature is turned off, the lights still flash 2 times upon unlocking.

“Panic” or 3rd Channel from Button III- This feature, #16, allows button III to operate either “Panic” or 3rd channel. In the default setting holding button III depressed for 3 seconds will activate the 3rd channel output. Panic can be activated from either the lock or the unlock button. Press and hold either button for 3 seconds to activate panic. With this feature off press and hold button III for 5 seconds to activate “Panic”. Press the lock and unlock buttons together for 5 seconds to activate the 3rd channel output.

1 Car or 2 Car Operation- When this feature is set for 1 Car (factory setting) the REC-11+ will operate regardless of the transmitter's A/B switch position. When set for 2 Car, one system can be operated with the switch in the “A” position, and a second system can be operated with it in the “B” position. This is programmable feature #17.

Secret Override Code- This feature, the first on the features' menu, is set at the factory with a “1 Press” default. Using this feature affects certain operations of the system, by providing greatly enhanced security. These operations which would be affected are:
✓ Overriding either of the two Anti-Carjacking features once they are fully activated.

The System Override is indicated by the Status Light stopping the slow flashing and going out, and the audible confirmation, if connected, will be one long and two short chirps. Once the activated system has been overridden, then pressing and holding the Valet Switch for 2 seconds will place the system into Valet Mode, as described in the previous section.

System Status Light

The REC-11+ includes a Red Status Light to inform you of the system's operational condition. If your system includes a Starter Disable circuit, it's condition is also reflected in this light's operation, along with any automatic features which may have been programmed to operate. These are the system conditions that the Status Light shows:

- | | |
|------------------------------|--|
| Light Off | Ignition switch is "on" OR the system is "at rest", or standby, awaiting a transmitter command, and is also indicating that no automatic functions are occurring or will occur. |
| Light On Solid Red | The system is in "Valet Mode". |
| Light Flashing Rapidly | An automatic function, such as automatic locking or automatic starter disable, is in progress. |
| Light Flashing Slowly | This slow flashing will occur whenever the transmitter has been used to lock the doors, and also |
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that the Starter Disable (if installed) is engaged.

Light Flashes 1 to 4 Times

after Ignition "On" Number of operating transmitters stored in the system. These indicators are part of the Automatic Transmitter Verification operation. If transmitters have been coded within the last 48 hours the Light flashes for 90 seconds instead of 10 seconds.

Visual Confirmation

The REC-11+ is capable of illuminating the vehicle's parking and dome lights to provide a visual confirmation of the system's operations. If connected, the parking and dome lights will:

Flash Once Doors have been locked by using the transmitter.

Flash Twice, then

Stay On 30 Seconds Doors have been unlocked by using the transmitter.

The parking and dome lights staying on for 30 seconds after the transmitter's use has unlocked the doors lights the way to the vehicle when dark and also allows inspection of the interior before entering. Turning the ignition "on" during the 30 second period will turn off the lights. The lights staying on for 30 seconds is a programmable feature.

seconds after the ignition switch is turned "off". This feature, #2, ensures that the doors will become locked every time you exit the vehicle and leave it unattended.

The second form is Automatic Relocking, which eliminates the accidental unlocking of the doors by accidental or unknown pressing of the transmitter's UNLOCK button. Activating this feature causes the system to automatically relock the doors 90 seconds after the UNLOCK button is pressed unless the ignition switch is turned "on". This is feature #3.

With either of these features, during the 90 second period, the Status Light will flash rapidly as a visual indication of the impending automatic locking or relocking action.

Automatic Starter Interrupt Engagement- If the optional starter interrupt is installed, in addition to its engagement whenever the transmitter locks the doors, these two features, #11 and #12, may be programmed to have it automatically engage in two forms (both features are turned off at the factory).

The first of these features, Automatic Starter Interrupt Engagement After Ignition "Off", has the starter interrupt automatically engage 90 seconds after the ignition is turned off.

The second feature, Automatic Starter Interrupt Engagement After Unlocking, has the starter interrupt automatically reengage 90 seconds after remotely unlocking the doors, unless the ignition switch is turned on within the 90 second period.

With either feature, during the 90 second period the Status Light will flash rapidly, then change to flashing slow once the starter interrupt engages. These two programmable features are separate from the previously-described automatic door locking and relocking features.

Activating Trunk Release Also Unlocks the Doors- This feature, programmed to operate at the factory, has the doors unlock whenever the transmitter is used for trunk release (button II). Even if the vehicle is configured to have the transmitter unlock

Switch must be pressed within 10 seconds of turning the ignition back "on"*. This is the only way to cancel or turn off the Anti-Carjacking feature - once activated, the transmitter cannot be used to cancel or turn off the feature.

**Important: If a Secret Override Code has been programmed, once Anti-Carjacking is fully activated at 60 seconds the custom Secret Override Code must be used to turn it off. Prior to that time (i.e. - before Anti-Carjacking fully activates), only a single press of the Valet Switch is all that is needed to cancel it.*

The first form of protection is Automatic Anti-Carjacking, which is activated every time the ignition switch is turned "on". In this form of Anti-Carjacking, the Valet Switch may be pressed within 60 seconds of turning the ignition "on", including the final 7 seconds when the piezo is chirping to remind you of impending full engagement of the feature. This is programmable feature #13.

The second form of protection, Remote Anti-Carjacking, is activated by pressing the transmitter's III button* for 3 seconds, but only if the ignition switch is already "on" (thus allowing other use of the 3rd Channel Output when the ignition switch is "off"). This form has the same 60 second period in which to cancel the full engagement of the feature. This is programmable feature #14.

**Note: if programmable feature #16 is set for "Panic" operation from button III, then Remote Anti-Carjacking would be activated by pressing the "LOCK" and "UNLOCK" buttons, not button III.*

Automatic Door Locking and Automatic Door Relocking- Two different forms of automatic door locking are available as programmable features; the system as received has neither turned on.

The first, Automatic Door Locking, has the system automatically locking the doors 90

Audible Confirmation

The REC-11+ is capable of audible confirmations when a transmitter is used, and for other operations. This audible confirmation can be installed by one of two methods: a small piezo buzzer, which is included, may be mounted inside the vehicle, for soft, internal audible confirmations, which is most useful for programming operations. Or, this output may be connected to an optional relay, allowing the REC-11+ to sound the vehicle's existing horn for it's audible confirmation. This later method allows full use of the remote "Panic" feature of the system, and programmable anti-carjacking protection. The audible confirmations are:

One Chirp Doors have been locked by using the transmitter.

Two Chirps Doors have been unlocked by using the transmitter.

Additionally, if the system is in Valet Mode, the system will also chirp once when the ignition is turned "off" as a reminder. Should these automatic operations be programmed to operate, single chirps will also accompany the engagement of automatic doorlocking and optional starter interrupt circuit engagement. See "Programmable Features" for more details.

Remote "Panic": Connecting the audible output to vehicle's horn adds the valuable safety feature of remote "Panic". Pressing and holding for 3 seconds either the transmitter's "LOCK" button or the "UNLOCK" button will activate the remote "Panic" feature, which sounds the vehicle's horn and flashes the parking lights and interior lights. Using the "LOCK" button to activate remote "Panic" causes the doors to lock upon activation (and

engagement of the starter disable if it is installed), and using “UNLOCK” to activate remote “Panic” causes the doors to unlock when it is activated.

Once activated, remote “Panic” will sound the horn and flash the lights for 60 seconds, when it will automatically stop. Or, the transmitter may be used at any time to stop remote “Panic” by pressing “LOCK” (which will also lock the doors) or by pressing “UNLOCK” (which will also unlock the doors).

Remote “Panic” can instead be programmed to be activated from the “III” button (Programmable Feature #16). When the REC-11+ is thus configured, remote “Panic” can only be activated by pressing the “III” button for 3 seconds, but it can be manually stopped with the “LOCK” button (which locks the doors), the “UNLOCK” button (which unlocks the doors) or by pressing the “III” button again (the doors will remain locked).

Optional Starter Disable

The REC-11+ features an active Starter Disable output which engages every time the transmitter is used to lock the doors, and it may also be configured to also provide an automatic (passive) Starter Disable. Connecting the Starter Disable requires optional parts.

Whenever the doors are locked via the transmitter, the optional Starter Disable will engage. Unlocking the doors with the transmitter will disengage the Starter Disable, allowing the engine to be started.

The Starter Disable may be configured to automatically reengage 90 seconds after the doors are unlocked by the transmitter; or, to engage automatically 90 seconds after the ignition switch is turned "off". See page 13 for more on these features.

Programmable Features

The REC-11+ has 17 programmable features. Some directly affect the operations of the system, while others aid the installer in adapting the system to differing installation parameters which are found among various vehicles. This section describes the programmable features, and then a following section explains how to program these features.

Independent Automatic Locking and Unlocking activated by the Ignition-

These features, which are set to operate at the factory, have the system automatically lock the doors when the ignition switch is turned "on", and automatically unlock them when the ignition switch is turned "off". The automatic locking and automatic unlocking are independently programmable. If the system was installed so that the driver's door only unlocks, then the rest of the doors if the “UNLOCK” button is again pressed, then these are also programmable regarding which doors automatically unlock when the ignition switch is turned “off”. These are features #4, #5, and #6.

Automatic or Remote Anti-Carjacking Protection- The REC-11+ offers two separate forms of Anti-Carjacking protection; both of which are turned off at the factory. Once activated by either method, the piezo or vehicle's horn will start chirping 53 seconds later. During the next seven seconds pressing the Valet Switch once will cancel the Anti-Carjacking feature. Even if a coded valet has been programmed, during this 7 seconds only 1 press of the Valet Switch is required to cancel the Anti-Carjacking feature. At 60 seconds the piezo or horn starts to sound and the parking and dome lights will start flashing. At 90 seconds the starter interrupt output will activate. Once the siren sounds and lights flash, Anti-Carjacking cannot be canceled unless the ignition is turned "off", then back "on"; the Valet