

Remocon LRT-1 programmable garage door opener keychain remote



DOES NOT COVER "Codehopper, Mega-Code," or other transmitters like Genie Intellicode or Merlin / Lift Master Security +

FEATURES AND SPECIFICATIONS

- You can "Duplicate" any frequencies between 255Mhz - 500Mhz.
- Each unit measures only 2" x 1-1/4" x 1/2".
- Fits in your pocket, on your key-chain, clips on your belt or clip anywhere.
- These are small, but powerful. They have better range than normal visor size remotes.
- These use less power than other remotes so the battery will last a longer time.
- These will automatically learn the frequency of up to four different remote controllers with the push of a button.
- These have glow in the dark buttons you can see which button to push in the dark.
- Each unit has 4-channels. This allows you to program and operate up to four separate devices with this one remote. Provided the devices all operate on the same frequency.
- Key chain spring-loaded clasp can be clipped anywhere. Fits easily in your pocket.
- Dimensions 2" x 1-1/4" x 1/2".
- Complete with battery.

USES

- Garage Doors: Automatically learns from your existing garage door
 - Home alarms
 - Car alarms
 - Remote car doors and trunks
 - Security Gates
 - Remote car starters
- Other uses:**

Frequently asked questions:

- 1. How do these work?

The remote is built with an automatic sensor that can learn the frequency from any other remote transmitter that operates between 255 and 500 megahertz. This is about 90% of all remote controls commonly used today.

- 2. How are these used for so many different functions?

Unlike most remote units that come with; garage openers, cars (for opening doors and trunks, car alarms, gates and other remote devices, this unit is programmable. This means you won't have to go out and buy a new remote at outrageous prices if you need a spare, or you lose one. The car dealers, auto alarm companies, garage door openers manufacturers hate these things and will not sell you one like this. They want to sell you a their "proprietary spare remotes". These businesses actually make more profit selling remotes than they make selling their primary products.

- 3. How many of these can I use at one time?

You can put one in every car and program each one to work for the same or different purposes. For example; my unit opens the gate, car doors and each garage door. My wife's opens the gate, each garage door and her car doors. The kids set theirs to open the gate, operate their car alarm, car doors, and the remote outdoor lights for when they come home late and have to park in the street.

- 4. What if I get a new car or a new garage opener. Is the unit useless?

No. You can always reprogram the unit to work with a new frequency of the new device, car, or garage opener. Each of the four buttons can re-learn any time.

- 5. How do I program these?

You simply press the button on your present remote unit that you want to learn from. With the touch of a button the new remote will automatically lock on the the proper frequency of the other remote unit and program it onto any of the four buttons to operate that exact frequency. In some cases additional tuning may be required to optimize the performance, or to allow the LRT-1 to receive the signal from the primary unit.

Operation & Programming Instructions for the REMOCON Model: LRT-1

- This programmable remote control (LRT-1) can duplicate a majority of fixed code remote controls. A fixed code remote control is one that transmits the same frequency, or code each time the button is pressed. This unit can duplicate the frequency as long as the original remote control operates between the frequencies of 255-500Mhz and the remote does not utilize Code Hopping or Anti-Code Grabbing Technology, which changes frequency each time the button is pressed.
- It is not possible to copy any remote that utilizes Code Hopping or Anti-Code Grabbing Technology. This is because these types of remotes send a different code each time the remote is pressed.
- The LRT-1 has four buttons that can each be used for multiple functions. The same code can be copied onto multiple buttons if desired. Alternatively, you can

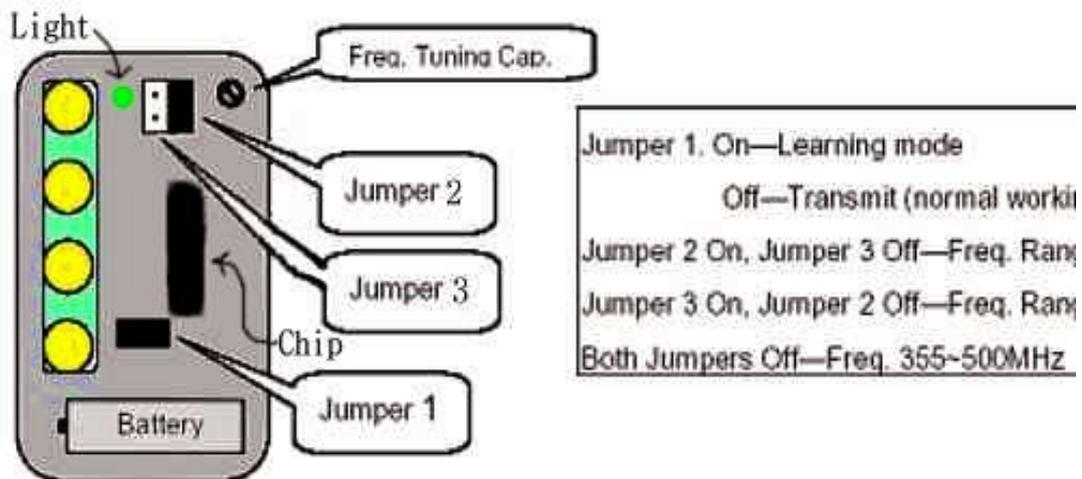
program the LRT-1 with a different code for some or each button to operate multiple devices from one LRT-1. If your original remote has a function controlled by pressing multiple buttons together, you must duplicate that code to a single button on your LRT-1. You can also copy multiple remotes onto the one LRT-1, provided they all operate on the same frequency. If you have remotes that operate on multiple frequencies, you will not be able to program one LRT-1 to work with all devices.

PROCEDURE TO AUTOMATICALLY DUPLICATE THE FREQUENCY OF YOUR REMOTE

- There are 3 jumper locations and two plastic jumpers in each LRT-1. The jumpers can be removed or installed onto the jumper pins with a pair of needle nose pliers or tweezers.
- Arrange the jumpers to match the table shown below.
- Jumper location 1 On : Learning Mode
- Jumper location 1 Off : Transmit (normal working mode)
- (Note the LRT-1 will not transmit in learning mode and will not program in operating mode):

Program Mode:

Frequency Range	Jumper 1	Jumper 2	Jumper 3
255~295 MHz	On	On	Off
295-355 MHz	On	Off	On
355-500 MHz	On	Off	Off



- 3. Place the LRT-1 and original transmitter right next to one another on a flat non-metallic surface. IMPORTANT: The learning reception on the LRT-1 has limited range. It is best (and may be essential) to arrange the LRT-1 so that the chip side of the LRT-1 is as close as possible to the chip in the original remote unit. Ensure that the units are arranged so that the chip in the original remote unit is as close to the chip on the LRT-1 as possible. You can determine this by trial and error rotating the original unit four ways as you try to program it, or open the original unit and identify the side closest to the large chip inside the original remote unit.
- 4. Once you have the units arranged so the chips are as close to one another as possible, press & hold down the button on the original remote that you wish to program onto button 1 of the LRT-1, and then immediately press & hold down the button on the LRT-1 that you want to program. The green LRT-1 light should light up green briefly and then go dark briefly.
- Hold both buttons down until you see the green light on the LRT-1 pulse three times. This should only take ~ 5-10 seconds. If you do not see the three pulses, you have not successfully duplicated the code from the original remote.
- In some cases, this may take several tries before the code will be recognized and stored onto the LRT-1.
- If you do not see the green light pulse three times, repeat step 4 until the green light pulses 3 times. |

Steps to take if you cannot get the green light on the LRT-1 to pulse three times after repeated attempts:

- A. Ensure that the chip side of the LRT-1 is arranged so that it is as close to the original remote as possible. Ensure that the original remote is arranged so that the chip in the original remote is as close as possible to the LRT-1 chip. Rotate one or both units to get the chips physically as close as possible.
- B. If the green light on the LRT-1 will not light at all, check to ensure the battery is in and that the battery is not backwards (+ should be towards the buttons on the LRT-1).
- C. Ensure that the jumpers are all correct (see step 2).
- D. If all else fails, use the tool provided to make minor adjustments to the Frequency Tuning Cap. (FTC). While holding down the button on the LRT-1 and the button on the original remote, turn the screw in the FTC very slowly clockwise and then counterclockwise until the green light on the LRT-1 pulses 3 times. Once you see the light pulse 3 times, make a note of which button you have programmed for that remote. Remember not to reprogram that button, or you may lose the code and have to reprogram it again.
- 5. Repeat steps 1-4 for buttons 2, 3, & 4 on the LRT-1 if desired.
- Note: After all of the buttons have been programmed, the unit will not yet transmit a signal, and it will not operate properly until step 6 is completed.
- 6. Remove Jumper 1 near the battery. This activates the unit and it is now in normal working mode. The LRT-1 now will not be reprogrammed and the LRT-1 will now transmit and operate. CAUTION: DO NOT LOSE THE JUMPERS. Place the unused jumpers over just one pin so you will not lose the jumpers. Alternatively, you can leave the jumpers loose inside the LRT-1. You may need the jumpers again someday, if you have to reprogram the LRT-1. As long as the jumper is only installed over a single pin at the jumper position, it will not activate that jumper position and can be stored there safely for future use, if required.
- 7. After you verify that the LRT-1 operates properly for each device you have programmed it for, replace the cover and screw closed using the tool and screw provided. Do not over tighten. The procedure is now completed.
- FCC Caution: This device complies with part 15 of the FCC Rules. This operation is subject to the following two conditions. (1) This device may not cause harmful interference and (2) this device must not accept an interference that may cause undesired operation.
- Note: If you get the LRT-1 light to pulse 3 times, but the LRT-1 will still not operate your device, or if the range of the LRT-1 is not sufficient, you may have to complete the following additional adjustments (First verify that jumper 1 has been removed. The LRT-1 will not transmit if jumper one is across both pins) :

TO MANUALLY ADJUST THE LRT-1 AND FINE TUNE THE FREQUENCY, FOLLOW THESE STEPS

- 1. Re-open the case of the LRT-1 using the tool provided. Replace Jumper 1 (Learn Mode).
- 2. Identify the frequency tuning capacitor (FTC). Refer to diagram.
- 3. Place the remotes together with the chips as close as possible. Press and hold down a matching button on each remote using two fingers from one hand (with a little practice you can do this yourself, or you may need a helper). Now part your fingers so as to slowly increase the distance between the remotes to the point where the green LRT-1 light becomes most dim, but is still visibly lit. As you do this, you may notice that the LRT-1 reprograms itself. After it reprograms itself (as indicated by the 3 pulses), the light will stay lit solid for only a few seconds. During this brief period, Use the tool provided to turn the screw in the FTC very slowly clockwise and then counterclockwise until the green light on the LRT-1 glows brightest. Once the FTC is adjusted to make the light as bright as possible, you have maximized the range of the LRT-1 for that device. This will also make the unit program more easily. Repeat as needed until the light on the LRT-1 lights bright green.
- During this process, you may notice that the LRT-1 will not reprogram, or loses its program. This is caused by the FTC being adjusted too much or in the wrong direction. To correct, place the units with their chips as close as possible to each other. Press and hold down the button on the LRT-1 and the original remote. Slowly turn the screw in the FTC very slowly clockwise and then counterclockwise until the green light on the LRT-1 pulses 3 times and glows brightest.
- IMPORTANT: After this process, be sure to remove Jumper 1 before trying to operate the remote. The LRT-1 will not transmit if Jumper 1 is on both pins on the jumper 1 position.
- 4. If you do not know the frequency range of your remote, try another Frequency Range by changing configuration of Jumper 2 & 3 and repeat the programming steps. Frequency Range Jumper 1 Jumper 2 Jumper 3 255~295 MHz On On Off 295-355 MHz On Off On 355-500 MHz On Off Off
- 5. Once successful, operating range can be maximized by moving to the furthest distance from the remote controlled device where the LRT-1 signal will still make the remote controlled device function. Take two steps backwards and minutely adjust the FTC in either direction until the alarm arms again. Repeat this procedure until maximum range is achieved.
- 6. Replace the case and screw it closed. Do not over tighten. The procedure is now complete.