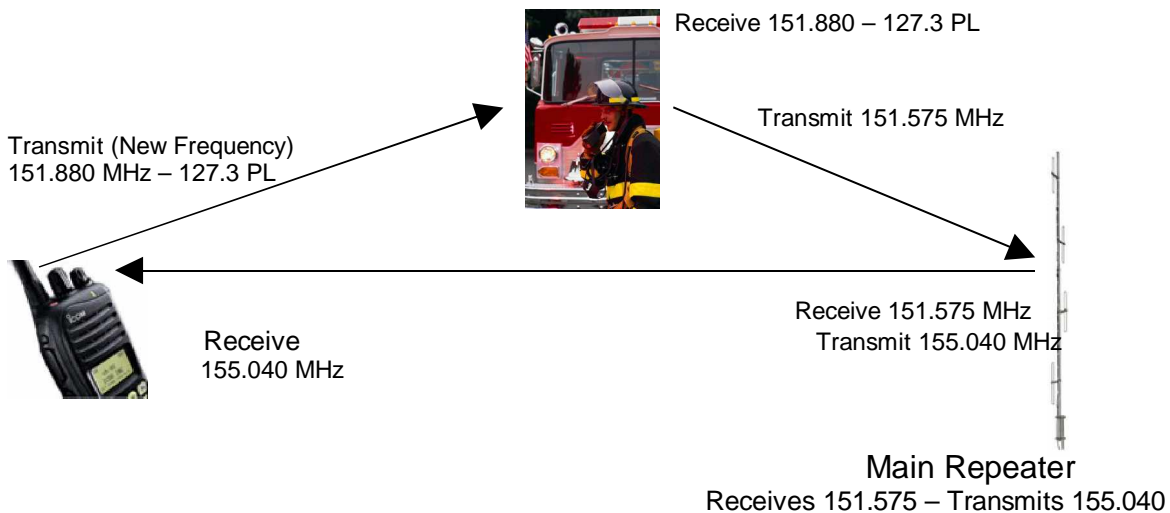




## Vehicular repeaters

We have reviewed the commonly available vehicular repeaters available for extending the range of a portable radio to be equal to that of a mobile. Essentially, they all work the same. The *repeater* consists of a receiver that cross links to the transmitter of the mobile and a transmitter that is activated by the mobile receiver.

The best known is the Pyramid SVR-200. Lesser known units are also available from Maxon, Relm, Vertex and perhaps others. The SVR-200 sells for \$1,250 plus a \$60 custom cable kit to fit most popular mobiles and a recommended warranty extension from one to two years for an additional \$80. The other units are a little less expensive, but a thousand dollar budgetary figure would be about right. However, this does not represent the total cost. The installation of a vehicle repeater requires tweaking the audio levels of the associated mobile radio as well as filtering alternator whine (a common problem with vehicle repeaters). There is also the cost of setting up a dedicated channel in the mobile and associated portable for use as a *control* frequency. Bottom line – if you get away for less than \$1,500 per vehicle, you will be doing very well. It is necessary to install an additional frequency in your mobile and portable radio as shown below.



By adding a new transmit frequency in the portable radio (151.880 MHz with a PL tone of 127.3) and the same frequency in the associated mobile radio, the portable receives calls directly from the repeater on 155.040 just like all other portables. However to talk back, the portable transmits on the new frequency of 151.880 which is received by the mobile repeater and then transmitted back to the repeater on the repeater receive frequency of 151.575 MHz.

The traditional vehicular repeater interfaces with the mobile radio to accomplish the *repeater* function through an accessory cable connected to the host mobile radio. We think there is better way that eliminates the need to connect to the mobile radio. It is called a TR-50 Command Post Repeater or CPR.

You will still need a control frequency. We can take care of that. You will still need to add a control frequency in your mobile and associated portable radio. We can also handle that but at considerably less cost since the programming doesn't have to be performed on site. It can be done on site or you can send the radios to us by UPS and we can do the programming in our shop at considerably less cost than sending someone to do the work on site.

**THERE IS NO INSTALLATION OR INTERFACE WITH YOUR EXISTING MOBILE RADIO REQUIRED WITH THE TR-50 CPR!**



This is the TR-50 CPR, a completely self contained portable repeater station with your choice of VHF or UHF models. The standard unit, priced at just \$825 is supplied with everything you need for an efficient and affordable vehicle repeater. Programming is included as well as a pair of VHF antennas (one each for transmit and receive), and AC cord for AC operation and a DC cord with cigarette lighter plug for DC operation.

The standard model uses two flex antennas and has the flexibility of being programmed on any frequencies of your choice, first by us, or later using customer software and programming kit (an \$83 option). A single antenna version, the TR-50D is optionally available for \$104 more with an internal tuned duplexer. This unit is set up and tuned by us (user programming kit not available for this model) on any frequency pair of your choice as long as the frequencies are separated by 3.5 MHz or more on VHF or 5.0 MHz on UHF.

Your TR-50 CPR weighs just 8.8 pounds and measures only 8.6 x 3.5 x 8.7 inches. Complete operating controls are included, and an optional palm type microphone (\$83) is available for direct communications without using an associated mobile radio. For most users, the standard \$825 model will perform the desired function. The only additional cost is the programming of an additional channel in the associated mobile radio and handheld radio. We can program most HYT, ICOM, Midland, Motorola, and Vertex models for a flat rate of \$35 per radio at our shop. We can program Kenwood models as long as we are supplied with the exact model number of the portable and mobile radio for the same price. On site programming is subject to a \$150 trip fee anywhere in Alabama.

Assuming on-site programming, your total cost would be \$825 for the TR-50 CPR, \$70 for programming of one associated mobile and portable plus a \$100 trip charge for a total of \$995 complete. We will provide the control channel at no additional cost, use the channel of your choice, or apply for a new frequency at additional cost as applicable.

As an alternate to a stand alone vehicular repeater, we recommend a combination 110 watt VHF mobile with internal vehicular repeater module. The Midland TITAN is an excellent choice for this application. It is slightly more expensive than the Pyramid vehicle repeater, but you get a whole lot more!

Notably, you reduce vehicle cockpit clutter by moving the radio to the trunk with only the control head required in the driver's compartment. You get a brand new radio with a three-year warranty, rated at 110 watts which is typically more than twice the power of ordinary mobiles. You get narrow band capability, virtually eliminate maintenance problems and benefit from a coordinated package rather than an add-on to an existing radio.

The Midland TITAN 110 watt mobile with internal vehicle repeater is available for just \$1,846 on the Alabama State contract. We will install it for just \$150 which bring your total to just \$1,946 complete. We will reprogram your current portable radios for FREE or we will make you an offer you can't refuse on a brand new portable of your choice from Motorola, Midland, or other vendor as desired.

Speaking of prices, the Midland Titan mobile is approved for sale on the Federal GSA contract as well as the Alabama State Purchasing Contract number 4007523, T-Number T300 which entitles all Alabama governmental agencies to a 35% discount - Kenwood only extends a 25% discount and Motorola extends a 15% discount. Clearly, Midland should be your radio of choice for the best in high powered public safety communications at affordable prices! Falcon Direct is a certified Midland reseller. A copy of our authorization as an Alabama contract supplier is available at [www.info4u.us/MidlandLetter.pdf](http://www.info4u.us/MidlandLetter.pdf). We also have a special web site that provides more information on Midland products at [www.midlandradios.us](http://www.midlandradios.us).



### Midland Titan Mobile

The special public safety version of the Midland Titan has 120 channels, 110 watts of power, and is designed for rear mount installation to conserve space.

The Titan has simple operating controls with conventional knobs for audio and squelch adjustments. Four pushbuttons provide scan, busy channel delete, monitor over ride, and repeater talk-around. The Titan can also be front mounted if desired but regardless of mounting selection, you'll always hear your message with dual priority scan and a 15 watt external speaker. Two models are available - the standard control head with 3 character LCD display (shown at the left), and a 12 character enhanced display which we provide as standard.

Regular Sales Price  
Deluxe Head  
**\$1,840.00**  
Alabama Contract  
Price  
**\$1,196.00**

### Handheld range extender

Add a handheld range extender as an internal option to the Titan mobile to give your handheld radios extending operating range through the mobile! Works with most popular handheld radios. DTMF keypad models such as the one pictured at the left can be used for remote mobile radio channel selection. Non-keypad models have fixed channel links to the mobile. The range extender option is factory installed and tuned inside the mobile radio housing. Available for VHF or UHF operation.



Regular Sales Price  
VHF Extender  
**\$1,000.00**  
Alabama Contract  
Price  
**\$650.00**