

# Extending radio communications

For convoy applications out of network coverage

Convoys on the move require constant communications from the lead vehicle to the last vehicle. Whether it is a military convoy, dangerous goods transport or a police motorcade providing dignitary protection, it is critical that everyone can communicate while on the move.

There are several approaches used to extend portable radio coverage in a convoy application based on the size and complexity of the convoy. For small convoys, direct (simplex) communications can work:



## Customer profile

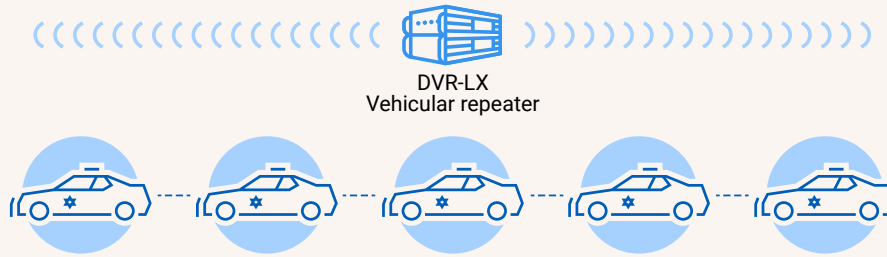
### Users

- Military
- Police
- Dignitary protection

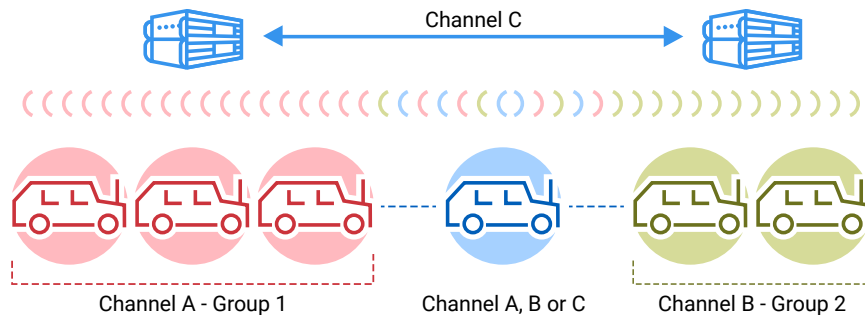
### Applications

- Radio coverage for Military and first responders on the move and out of network coverage.

As a convoy gets larger and the distance from front to back is too great for simplex operation, the simplest approach is to install a DVR-LX into the middle of the convoy.



Once the convoy is too long for a single DVR-LX vehicular repeater, two vehicle mounted DVR-LX's, each covering part of the convoy, is a solution. A simplex channel on the mobile radios is used to link them together. Portables towards the rear of the convoy would be on DVR Channel A. Portables at the front on DVR Channel B. Portables in the middle would be on mobile simplex channel C. The DVR-LX's are located at around the 1/3 and 2/3 points. This application is used by many police departments during marathon events when police operations are on the move with runners.



The DVR-LX P25 vehicular repeater is a well-suited solution for teams that are on the move. It can be used in a variety of situations and convoy sizes.

To learn more, visit: [motorolasolutions.com/dvr-lx](https://motorolasolutions.com/dvr-lx)



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