

# Extending shipboard communications using the DVR-LX P25 suitcase repeater

A common issue that shipboard teams face is the ability to communicate from inside the vessel to their land mobile radio system. Portable radios attempting to communicate are challenged by an environment including heavy steel and high noise. Whether it's a security detail, maintenance teams or a boarding party, radio communications are vital.

There have been two approaches used to extend portable radio coverage aboard these vessels.

The first is to simply use one antenna inside the ship, past the bulkhead(s) to communicate with portables and another antenna on the deck, to get back to the network. On many ships, this is sufficient. For larger ones, or those with an extensive interior structure, it may be necessary to extend the one antenna down below deck by means of a longer antenna cable.

## Customer profile

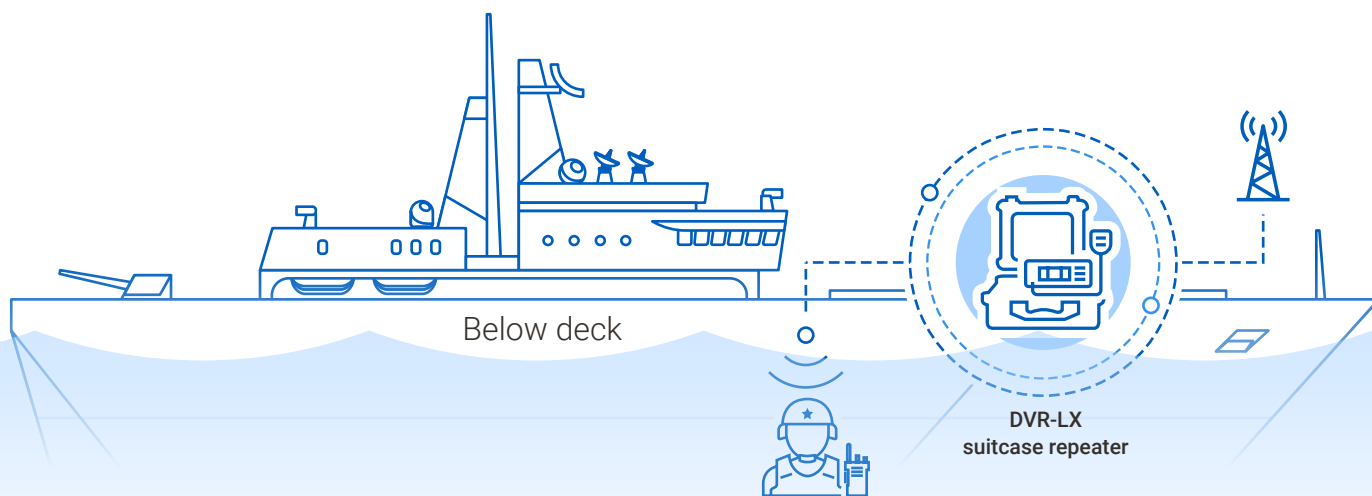
### Users

- Naval ship on-board operations including security and maintenance
- Customs and Border Protection
- Coast Guard

### Applications

- Public safety radio coverage throughout naval ships, submarines and cargo ships.

The second approach, used most often when the ship is docked for an extended period such as a maintenance refitting, is the use of a leaky feeder or radiating cable installed through the center of the vessel. The DVR-LX suitcase repeater is then connected to this cable and to another (network) antenna topside. The DVR-LX suitcase repeater repeats locally (extending coverage between users in the ship) and also relays the communications back to the land based network. With P25 networks most network features can also be extended including portable ID, emergency and private call.



Should the ship be outside of network communication, as a repeater, the DVR-LX suitcase repeater can still be used to extend coverage between team members below deck, as well as linking to others on deck or on the bridge (by putting the DVR-LX attached mobile on a simplex channel)

The DVR-LX P25 suitcase provides instant radio communication and can be used in a variety of applications to extend mission critical radio communications

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



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