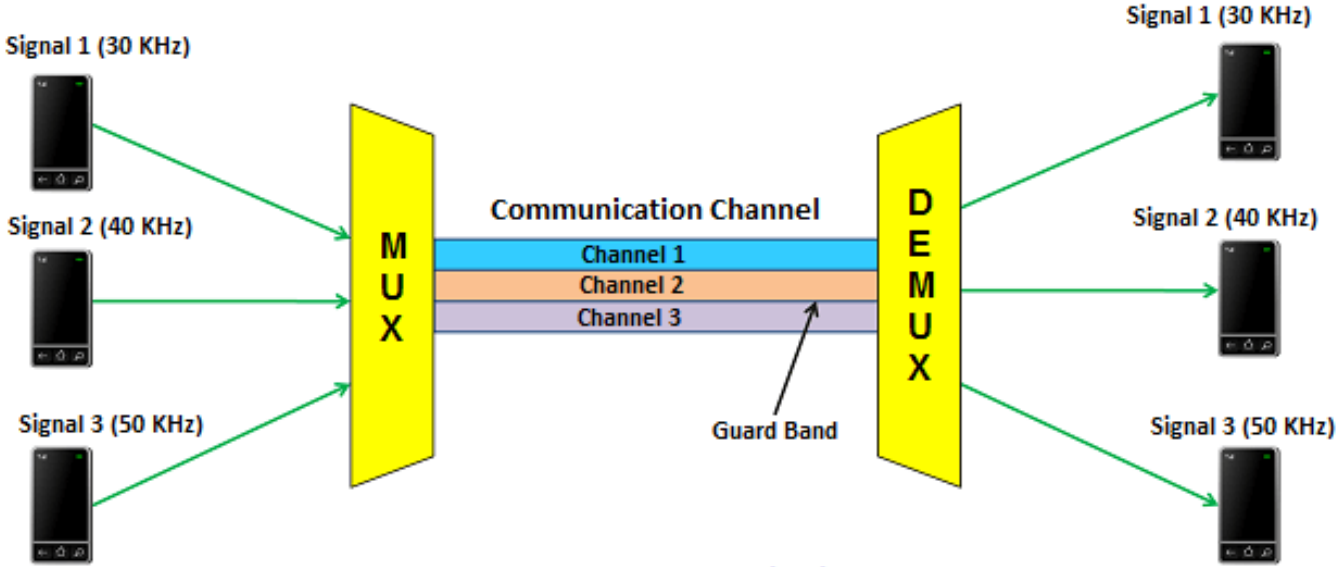
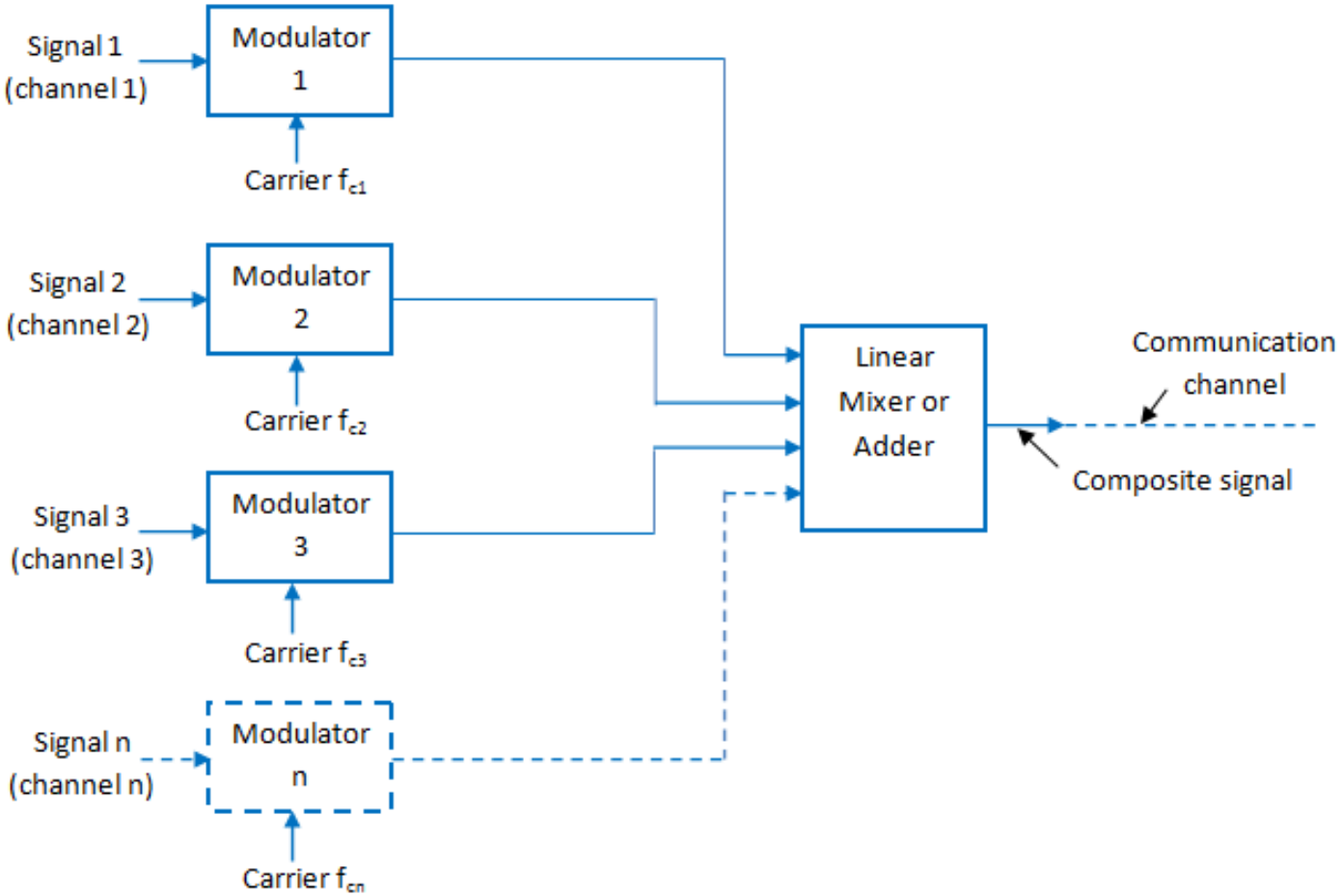
FDM

In this, a number of signals are transmitted at the same time, and each source transfers its signals in the allotted frequency range. There is a suitable frequency gap (Guard Band) between the 2 adjacent signals to avoid over-lapping.

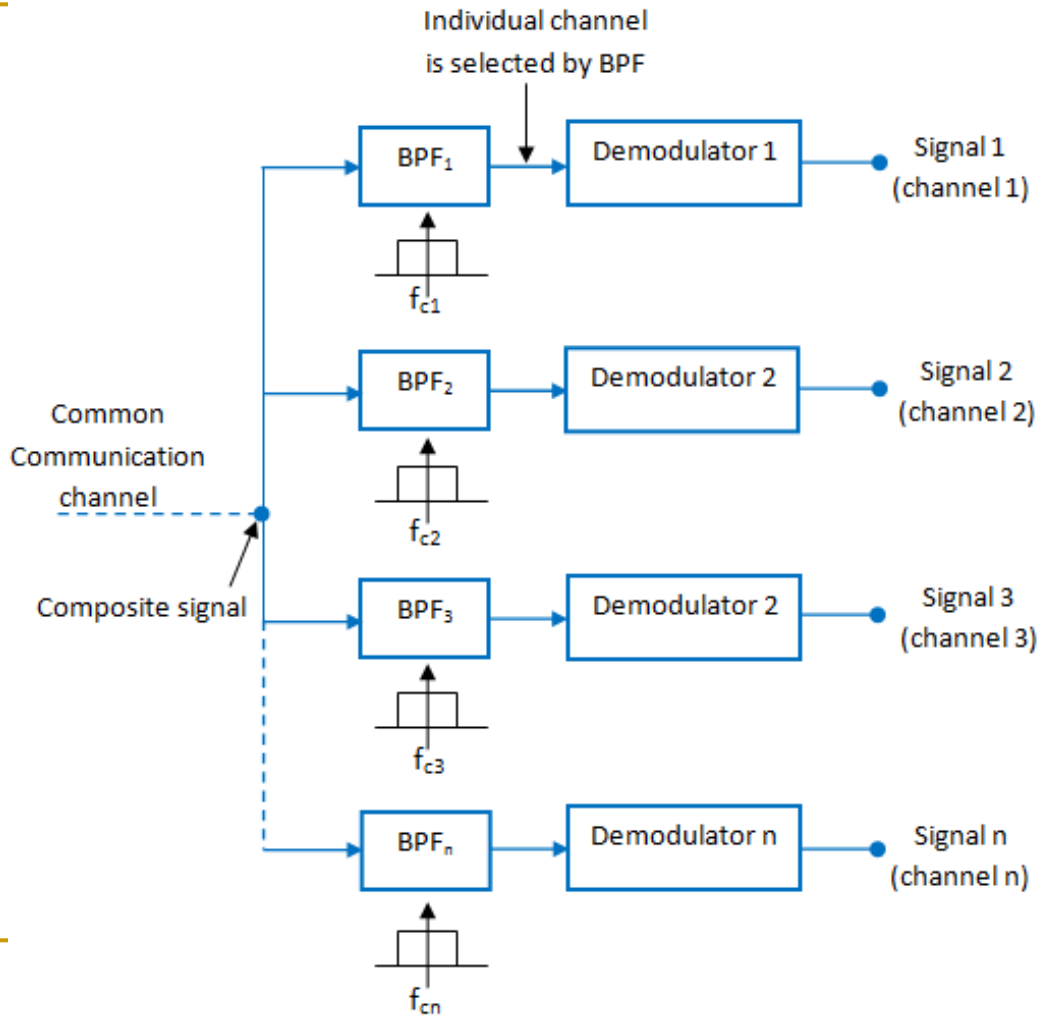


Frequency Division Multiplexing

FDM Transmitter



FDM Receiver



FDM

PROS:

- It uses analogue signals
- Multiple signals can be transmitted simultaneously
- Demodulation is easier
- It does not require synchronization between sender and receiver

CONS:

- Low speed channels supported
- Problem of crosstalk
- Large number of modulators required
- High bandwidth channel requirement to operate

Applications of FDM (Frequency division multiplexing)

- FM and AM radio broadcasting
- Television broadcasting