Advantages and Ideal Applications for Full- Duplex Systems



There are three types of radio communication types: <u>Simplex, Half-Duplex</u>, and <u>Full-Duplex</u>. Each has its place in workplace communication. In **Simplex Communication**, data is sent in only one direction. In **Half-Duplex Communication**, data can only be sent from one device at a time. Once that device has finished sending its data, the other device may send data. In a **Full-Duplex Communication**, all devices on the network may transmit data at any time. Knowing the advantages and ideal applications of each can help make communication more efficient and also help choose the most cost-effective solution.

| | ADVANTAGES | IDEAL APPLICATIONS |
|----------------------------------|---|---|
| TeamTalk™ | No FCC licensing requirement Superior Sound quality Hands-free, no need to PTT | Smaller teams/work groups in proximity Training or other situations where communication requires frequent back and forth Plant tours when users are inexperienced with PTT technology |
| Traditional Two-Way Radios | Multiple talk groups Can cover large facilities (over 1000 ft distances) Can build a complex system to cover multiple facilities Deliberate communication (less chatter, miscommunication) | Large facilities/longer distances Multiple talk groups |

