



DPR200

Digital Personal Radio
**Multi-way Duplex
Communication System**

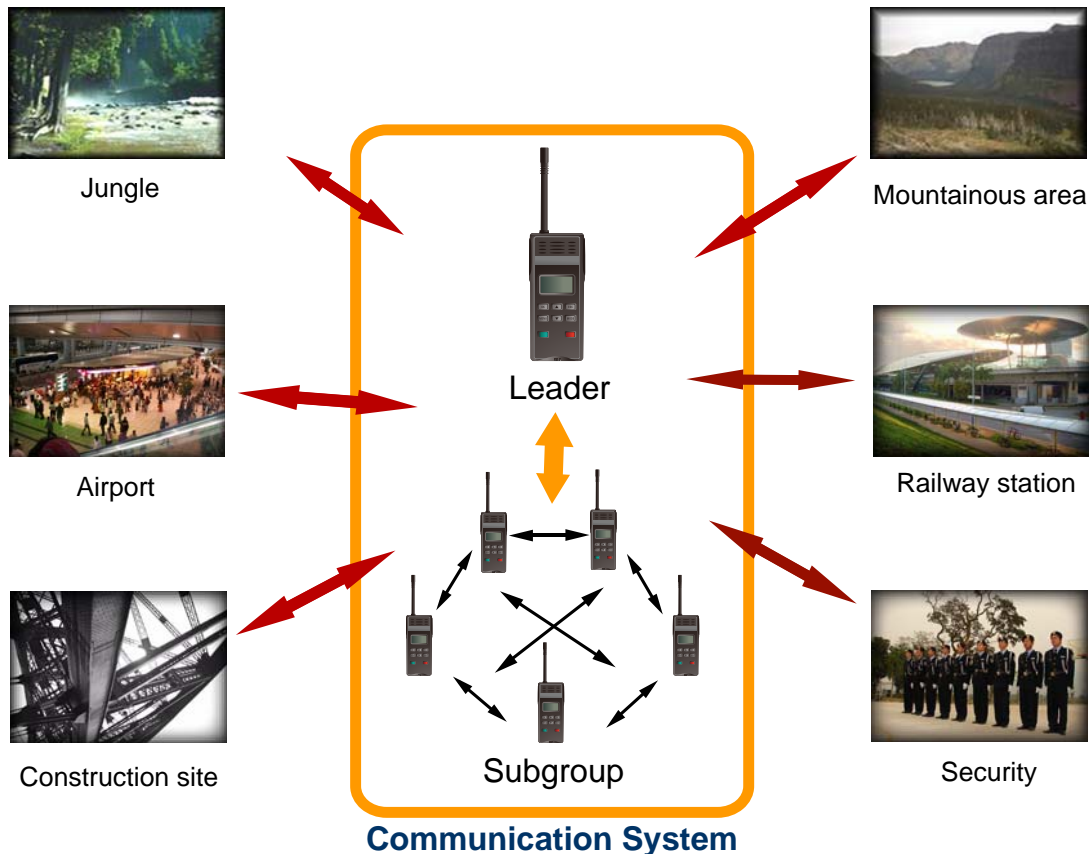
Introduction of DPR200

Characteristics of Features/Function

The DPR200 is an advanced digital communication system that offers many features not found in conventional radios. The key features are:

- ⊙ Full-duplex multi-way communication that allows multiple parties to speak and hear simultaneously.
- ⊙ Use of 2.4GHz DSSS (Direct Sequence Spread Spectrum) / FHSS (Frequency-Hopping Spread Spectrum) technology for secure and reliable communication.
- ⊙ Sophisticated group configuration that supports the creation of multiple communication subgroups within a large network of DPR200's.
- ⊙ Advanced Ad-hoc technology without any base station.
- ⊙ Wireless PTT switch for convenient remote control of DPR200
- ⊙ Up to 2 km in communication distance using all-digital transmission
- ⊙ Highly reliable and low probability of interception and detection
- ⊙ High-speed voice communication and data transmission
- ⊙ Low transmission power
- ⊙ Dustproof, anti-strike, anti-drench enclosure for operation under all weather conditions.

Application indication

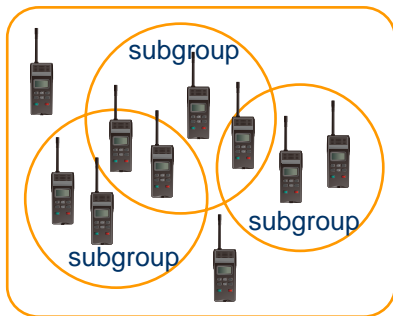


Group Communication

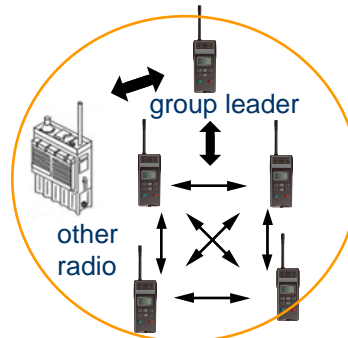
Group Configuration

The DPR200 supports the configuration of communication subgroups within a network of up to 128 radios. At most 9 subgroups can be pre-configured via a PC and one additional ad-hoc subgroup can be configured on the fly.

- Each subgroup can include up to 12 radios.
- A radio can be configured to participate in multiple subgroups.
- Members of a subgroup can engage in multi-way full-duplex communication with up to 4 members speaking simultaneously while all other members listening.



The whole network



Communication Network for a subgroup

Ad-Hoc Group Configuration

One subgroup is available to be configured on the fly without a base station. Only pre-entitled radios are allowed to configure the ad-hoc group in the field.

Communication Modes

The DPR200 supports multiple communications modes. Users can switch between all three modes at any time by using PTT key (this key will be described at another page).

a. Broadcast Mode

- In broadcast mode, one single radio can broadcast to up to 127 radios in the same network.
- All other radios can listen only.

b. Point-to-Point Full-Duplex Mode

- Two radios can establish a point-to-point full-duplex communication channel with each other.
- Both radios can speak and listen simultaneously.

c. Multi-way Full-Duplex Mode

- Under this mode, 5 radios can speak simultaneously while other radios listen.



PTT key



Broadcast



Point-to-Point Full-Duplex



Multi-way Full-Duplex

System Package

Units in a giftbox



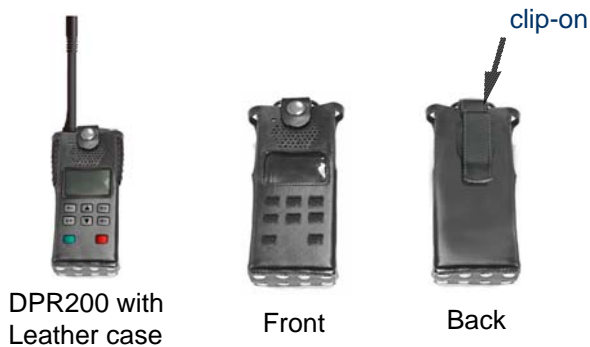
Connection Sketch



Accessories

Leather Case

The leather case with clip-on helps to easily wear and protect the DPR200.



Headset

The headset (with a mic) fits comfortably under most military ballistic helmets.



Main Technical Specifications

Working Frequency:	2.4 GHz ISM
System processor:	ARM + DSP
Way of Communication:	DSSS/FHSS
Multiple Access Technique:	TDMA/FDMA/CDMA
System Bandwidth:	41 kbps
Maximum data transfer rate:	5.15 kbps
Speech Coding:	One-way voice 5 kbps
Transmitting Power:	0.5W
Working time:	8 hours