

## **PRC1077**

### **VHF Manpack Radio**



- **30 to 88 MHz, 25 kHz Steps**
- **10 Programmable Memory Channels**
- **Rugged, Completely Immersible**
- **Manpack/Mobile/Base Configurations**
- **2/5/50 Watts**
- **Internal Automatic Antenna Matching Network**
- **Embedded Encryption (optional)**
- **Low Current Drain**
- **Drop-in Replacement for AN/PRC-77**
- **Multiple Battery Charging Options**

Datron's PRC1077 is a VHF/FM tactical manpack transceiver designed for use in demanding environments. It is a 5W radio operating over the full 30 – 88 MHz frequency range with 25 kHz resolution. The PRC1077 is rugged, compact, and can be configured with numerous add-on ancillaries and accessories to create a wide variety of manpack, mobile, or base station systems.

Originally designed as a “drop in” replacement for the AN/PRC-77, the PRC1077 has a modular, open-architecture design. This has allowed the use of modern components and has resulted in a product with the flexibility for future expansion.

The PRC1077 incorporates all the features required in a tactical manpack radio. It is reliable, lightweight, easy to program, easy to use, and provides long mission life due to low current drain.

The PRC1077 has a high-performance receiver, a wide temperature range LCD display, 10 preset memory channels, and a broadband transmitter with three unique, operator-selectable power levels. The entire radio is packaged in seven easily removable modules providing quick and easy field maintenance.

An optional encryption module can be embedded into the PRC1077 to provide over-the-air voice security for those situations where tactical communications security is required.

The PRC1077 is a modern manpack radio with high performance features that still retains the same form, fit, and function of the AN/PRC-77. This provides existing users, both foreign and domestic, the ability to economically modernize their tactical VHF systems without obsoleting their extensive inventory of accessories and ancillary equipment. Although the PRC1077 is completely interchangeable with the PRC-77, and can be used in all PRC-77 configurations, it is much more reliable, easier to use, and offers significantly higher performance.

A full range of accessories is available for the PRC1077. They include the AM1077 50W RF Booster Amplifier, PS1077 Power Supply Adapter, MT1077 Mobile Mount, and PRC1077-ECU Extended Control System. The PRC1077 in its high or low power configurations can be used with either +12Vdc or +28Vdc primary power.

## PRC1077 SPECIFICATIONS

### **GENERAL**

Frequency Range	30 - 88 MHz;
Available Channels	2320 in 25 kHz steps
Preset Channels	10 Programmable memory channels
Channel Programming	Front panel
Modes	FM; simplex, semi-duplex
Input Power Requirements	11 – 15 Vdc;
Battery Pack	BB-LA6 sealed lead calcium; BA5598/U Lithium (case holds spare battery)
Battery life	30 hrs @ 9:1 duty cycle (2W Tx) using BB-LA6
Antennas	3 ft tape and 10 ft whip; 50 ohms
Antenna Port	BNC for 50 ohm broadband antennas or for connection to external amplifier; whip antenna port.
Display	Backlit, multi-function custom LED

### **Mechanical, Environmental**

Size	11.1" x 4.1" x 9.25" (28.2cm x 10.5cm x 23.5cm); W x H x D, including battery pack.
Weight	9.7 lbs (4.4 kg), w/o battery pack; BB-LA6 pack is 2 lbs (0.9kg).
Package	OD, sealed, including battery pack.
Temperature	-40 to +60 degrees C.
Shock, Vibration, Humidity, Fungus, Altitude	Per MIL-STD-810

### **Transmitter**

RF Power Output	0.3W, 2W or 5W, PEP or average; selectable
Duty cycle	Continuous service, all modes
Harmonics	-50 dB (2 to 30 MHz)

### **Receiver**

Sensitivity	10 dB SINAD for 0.3uV input
Squelch	150 Hz tone, carrier; selectable
Audio	500mW into 16 ohms; 50mW @ 150 ohms; 0 dBm into 600 ohms.

### **Accessories**

Amplifier	AM1077 50W RF unit
Mobile Mount	MT1077, +12Vdc or +24Vdc versions; mounts to any vehicle
Power Supply	PS1077 for portable usage; UPS100-28 or RUPS100-12 for base station
Charger	PRC-BC4 (4-unit charger), PRC-PS (power supply or 2-unit charger), PRC-SPU-10 (solar power unit), PRC-HC-30 (hand crank generator)
Converter	AM1077CONV, 12-to-28Vdc

**Note: all specifications subject to change without notice**



3030 Enterprise Ct.  
Vista, CA 92081  
www.dtwc.com

(760)-597-1500 (ph.)  
(760)-597-1510 (fax)  
sales@dtwc.com