

DATRON



V H F R A D I O S

**30 - 88 MHZ
FREQUENCY RANGE**

**MAXIMUM MISSION
FUNCTIONALITY**

**MULTIPLE
CONFIGURATIONS**

**SECURE
COMMUNICATIONS**

**COMPLETE
INTEROPERABILITY**

MIL-STD-810E

**FIELDDED
WORLDWIDE**

**EASY OPERATION
AND MAINTENANCE**

**TOTAL LOGISTICS
SUPPORT**

Datron World Communications' family of VHF radios consists of a complete line of tactical VHF/FM radio equipment that is currently unmatched in the industry. Systems range in capability from the affordable PRC1077 (designed as a drop-in replacement for the AN/PRC-77 and VRC-12 radios) to the PRC2100V Spectre V,™ one of the most advanced and powerful tactical VHF radios on the market today.

DWC's VHF systems are designed to provide reliable voice and data communication over the entire 30 - 88 MHz range. System choices include "stack" mount configurations for fixed station and shelter environments as well as manpack, mobile mount, and "jerk and run" set ups for field operations.

All radios in DWC's VHF family are easy to operate and maintain. Despite their sophistication, they provide a

simple user interface to ensure rapid and decisive operation even under the harshest of tactical situations.

Total interoperability among all DWC VHF/FM equipment configurations allow for use in a common network. Common frequency plans and common hopping and encryption keys can be loaded into the radios, thus allowing deployment of multiple transceiver types as needed on the same mission in a single or multiple nets. Orthogonal hopping in secure radios allows adjacent nets to use the same hopset of frequencies without mutual interference. In congested battlefields, with a high premium on clear frequencies, this feature provides a lifesaving tactical advantage.

All radios are built to MIL-STD-810E to ensure reliable operation in the harshest of combat environments. Vehicular configurations are

T H E



PRC1077



PRC1060/70/80



PRC1088

ERVIEW



compatible with the AN/VIC 1/2 intercom set and meet both MIL-STD-1275 and applicable parts of MIL-STD-461A for operation in a variety of vehicles and sensitive situations.

DWC offers a full range of accessories including tactical antennas, mounts, and amplifiers. These additions allow for a wide range of mobile and fixed-station configurations ranging from 50W to 75W.

RADIO S



PRC2100V

PRC1077

The PRC1077 is the most reliable, cost-effective, tactical VHF/FM radio on the market today. Its low current drain ensures long mission life. It contains a high performance receiver and offers 10 preset memory channels and a broadband transmitter. It is fully interoperable with both the AN/PRC-77 and SINCGARS radios in all non-hopping and non-secure modes. Since it was originally designed as an advanced “drop in” replacement for the AN/PRC-77, users can easily modernize their tactical systems without obsoleting existing equipment.

PRC1060/70

The PRC1060 is a fixed-frequency handheld squad radio that provides portable communication in a lightweight, rugged, and waterproof housing. It is designed for single-channel, fixed-frequency operation making it interoperable with the PRC1077. The PRC1070 model is upgradable to frequency hopping and ECCM/COMSEC.

PRC2100V

The PRC2100V is the full-featured version of DWC’s “next generation” Spectre V family. In addition to offering the same features and performance as the fixed-frequency PRC2150, the PRC2100V is available with full-band hopping and encryption. It also has the same innovative user interface, with menu-driven screens programmable in the operator’s language, making operation intuitive even under stressful battlefield conditions.

PRC1088

The PRC1088 provides reliable operation, over 9 preset channels in four modes: fixed frequency, fixed frequency/secure, frequency hopping, and frequency hopping/secure. It features full retransmission capability in all modes along with ECCM/COMSEC. Eight frequency plans provide up to 2320 programmable channels to allow automatic “late entry” into 800 hopping nets.

PRC1080

DWC’s PRC1080 is specifically designed for secure communication in a squad mission environment. With full band hopping and encryption, it offers high-quality performance in a package 1/6 the size of a manpack. Available in either a handheld or mobile configuration at power levels from 100mW to 35W.

PRC2150

The PRC2150 is the fixed-frequency version of DWC’s advanced new Spectre V product family. Utilizing either 12.5 or 25 kHz spacing, the radio can be programmed to have multiple frequency nets with up to 100 preset channels in each network. It can be configured as either a 10W manpack or 75W mobile station using dual radios. The PRC2100 is available with an embedded GPS receiver and powerful error correction algorithms allow error-free data transmission at multiple data rates. High dynamic range allows radios to be co-located without performance degradation.

A C C E S S O R I E S

Part Number	Used With	Description
Amplifiers		
AM-1077	PRC1077	50W RF booster amplifier
AM-1077ATU	PRC1077	50W RF booster amplifier with internal auto-tuner for 3m whip
AM1088	PRC1088	50W RF booster amplifier with frequency agile capability
AM2100	PRC2150/2100V	75W RF booster amplifier with frequency agile capability
MT1060MM	PRC1060/70/80	35W RF booster amplifier with frequency agile capability
Mounts		
MT-1077-12	PRC1077	Mobile mounting tray with speaker for +12 Vdc vehicles
MT-1077-24	PRC1077	Mobile mounting tray with speaker and power adapter for +24 Vdc vehicles
MT-1029/VRC	PRC1077	Standard MIL mobile mounting tray for +24 Vdc vehicles; must be used with OA3633/VRC (Note: must also be used with MT1088 in PRC1088 vehicular system)
OA3633/VRC	PRC1077	MIL radio mount and power adapter; includes speaker; used with MT-1029/VRC mounting tray
MT1088	PRC1088	Radio mount and power adapter; includes speaker; used with MT-1029/VRC mounting tray
MT1060DS	PRC1060/70/80	Docking station for squad radio; has connection for external speaker; for +12Vdc vehicles; draws power from MT1060MM for use in +24 Vdc vehicles
MT2100MM	PRC2150/2100V	Mounting tray for 2100-series radios; used with MT2100
MT2100	PRC2150/2100V	Power adapter for 2100-series radios; +24 Vdc vehicles; has connection for external speaker; used with MT2100MM mounting tray
Antennas		
AT-892/U	PRC1077	Standard MIL 1m blade antenna for tactical use in manpack mode
AT-271A/U	PRC1077	Standard MIL 3m whip antenna for tactical use in manpack mode
AT892BB	PRC1088	1m broadband blade antenna modified for frequency agile usage
AT271BB	PRC1088	1m broadband whip antenna modified for frequency agile usage
AT892BB		
-ADPT	PRC1060/70/80	1m broadband whip antenna; modified for frequency agile usage; special connector for mounting to squad radio
RUBANTBB	PRC1060/70/80	Flexible rubber 1ft antenna for squad radio
AT892M	PRC2150/2100V	1m blade antenna for 2100-series radios
AT271M	PRC2150/2100V	3m whip antenna for 2100-series radios
4242-MK1	All VHF Radios	50 ohm broadband vehicular antenna for use on any vehicle with any of the VHF radios
OE-254/GRC	All VHF Radios	50 ohm broadband deployable antenna for use with any of the VHF radios
ECCM/COMSEC		
1088CMS	PRC1088, 1080	Crypto Management System for 1088-type hopping and encryption algorithms; includes computer and software for PRC1088 and PRC1080 key generation and frequency planning
KF1088B	PRC1088, 1080	“Dumb” handheld keyfill device for downloading keys from 1088CMS to radios; requires radio power
1088CD	PRC1088, 1080	Cloning device used to fill one KF1088B from another
KF1088	PRC1088, 1080	“Smart” keyfill device; used to program keys and frequency plans and download fill to radios; has own power source
2100CMS	PRC2100V	Crypto Management System for 2100-type hopping and encryption algorithm; includes computer and applications software for PRC2100V key generation and frequency planning
KF2100	PRC2100V	“Dumb” handheld keyfill device for use when downloading keys from 2100CMS to radios; requires radio power
2100CD	PRC2100V	Cloning device used to fill one KF2100 from another

(Note: Refer to the DWC Product Catalog or contact a factory representative for service and system configuration details)

Specifications are subject to change without notice