

PRC1099A Tactical HF Manpack Transceiver section 4

July 2014

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Features

1.6 MHz-30 MHz	100 Memory Channels
10 Hz Synthesized Steps	Fully Automatic Antenna Tuning
Manpack & Mobile	FED-STD-1045A ALE
20/100/PEP/AVG Systems	



Introduction

The PRC1099A is a HF tactical manpack transceiver that provides 20W output power and covers the full 1.6 to 30 MHz frequency band with 10 Hz resolution. It is rugged, lightweight, and easy to use. Any of its 100 preset memory channels can be configured for maximum mission flexibility. All systems are MIL-STD-810 compliant and completely immersible to satisfy the most demanding environmental conditions.

The PRC1099A is designed as the core of a complete family of HF products. It can be configured with a broad range of accessories to create a wide variety of manpack and mobile systems. This “building block” approach allows a user to have 20W or 100W systems by adding other Datron accessory equipment to the core radio as required. Each PRC1099A system is immersible, designed for extremely harsh environments, and is rated for continuous duty-cycle operation.

The PRC1099A has a built-in antenna tuner and can be used with both whip and long-wire antennas. A variety of internal options are available for the PRC1099A including MIL-STD-188-141A compatible, FED-STD-1045A ALE.

PRC1099A Manpack Transceiver

HF-SSB synthesized, 1.6-30 MHz manpack transceiver, 12 Vdc, 20W PEP and average; voice (USB/LSB), and CW modes are standard. Simplex and semi-duplex, continuous coverage, 10 Hz steps, with 100 programmable memory channels. Designed to the requirements of MIL-STD-810 for operation under severe vibration and shock environments. The PRC1099A is fully interoperable with most U.S. military standard audio accessories, antennas, and specialized accessories such as crypto equipment. Order cables and accessories separately. The basic PRC1099A includes the transceiver, battery box, and an operator manual. A diagram of a typical manpack system is shown later in this section.

Note: Unless otherwise indicated, all power levels listed are average power values.

PRC1099A Internal Options

For field installation, contact your Datron Sales Representative.

1. 1099ALE
2. 1099IBC
3. 1099AAME

1099ALE

FED-STD-1045A ALE module provides a fully compatible system for ALE operation, including high-speed scanning, sounding, link quality analysis, and send/receive order wire message capability. Provides selective calling as well as “best available frequency” selection. Use external data terminal (optional) or alphanumeric keypad of radio for order wire message composition. Custom LCD provides alphanumeric display of message. Programming of all ALE functions possible from either the radio front panel controls or from an external computer running appropriate Datron software.

1099IBC

Internal battery charger permits charging of attached NiCad battery from an 11-30 Vdc source. Includes connecting cable.

Note: The 1099IBC cannot be used with lead-calcium batteries.

1099AAME

Amplitude Modulation Equivalent (AME) option to allow AM radios to receive the transmitted signal from the SSB radio.

PRC1099A Manpack Accessories

Datron offers a wide variety of accessory equipment to use with the PRC1099A in a manpack configuration. Manpack accessory equipment is listed below and encompasses the following categories:

1. Power Accessories
2. Carrying Accessories
3. Audio Accessories
4. Manpack Antennas



1. Power Accessories

The following accessories are available for powering the manpack radio and charging batteries.

- a. Batteries
 1. BB-LA6
 2. BB-NC4

BB-LA6

A 12Vdc sealed lead-calcium rechargeable battery pack that fits into the transceiver battery case and attaches to the rear of the transceiver. Rated at 6.0AH, maximum. When used with the PRC1099A it provides approximately 10 hours of mission life at a 9:1 (RX:TX) duty cycle at 20W transmit power. When used properly the battery pack can be successfully recharged between 500 and 700 times.

BB-NC4

“D” size battery cassette for dry-cell batteries or “D” NiCad cells. Cassette does not include batteries. Fits inside standard PRC1099A battery case. Only usable at 5W transmit power level with “D” dry-cell batteries.

- b. Battery Chargers & Power Supplies

1. PRC-BC4-110
2. PRC-BC4-220
3. PRC-PS

PRC-BC4-110

Multiple battery charger. Charges up to four BB-LA6 lead-calcium batteries simultaneously. Automatic rapid/taper charge characteristic. Individual charge status indicators. Includes three C991610 charging cables and C991609 dc power cable. Includes 110 VAC power cord. 110 VAC, 24 Vdc input.

PRC-BC4-220

Identical to PRC-BC4-110 except includes 220 VAC power cord.

PRC-PS

Power supply/battery charger for one BB-LA6 sealed lead-calcium battery pack. Will charge attached battery and power the radio simultaneously. Automatic rapid/taper charge characteristic. Includes C991608 control cable and C991609 dc power cable. Includes 110 VAC or 220 VAC power cord. 110/220 VAC, 24 Vdc input. Specify ac voltage when ordering.

c. Solar Power Unit

1. PRC-SPU-10

PRC-SPU-10

Lightweight, fold-up, 10W solar panel. For recharging BB-LA6 battery pack. Order C991617 adapter cable separately to charge stand-alone battery. Order C991613 adapter cable separately to charge battery installed in radio.

d. Hand Crank Generator

1. PRC-HC-30

2. PRC-HC-MP

3. PRC-HC-TM

PRC-HC-30

Hand-crank generator, 30W. For recharging 12 Vdc battery packs such as BB-LA6. Double handle. Use monopod or tree mount. Complete with C991611 adapter cable for charging battery installed in radio. Order C991618 cable to charge stand-alone battery.

PRC-HC-MP

Monopod mount. For hand-crank generators. Unfolds to convenient operating height.

PRC-HC-TM

Tree mount with tree strap. For hand-crank generators.

e. Charging Cables

1. C991608

2. C991609

3. C991610

4. C991611

5. C991613

6. C991617

7. C991618

C991608

PRC-PS to PRC1099A power/charging cable. Comes with the PRC-PS.

C991609

PRC-PS input dc power cable. Comes with the PRC-PS.

C991610

PRC-BC4-110(-220) to BB-LA6 charging cable. Comes with the PRC-BC4-110(-220).

C991611

Hand-crank generator to radio charging cable. Comes with the PRC-HC-30.

C991613

PRC-SPU-10 to radio charging cable. Comes with the PRC-SPU-10.

C991617

PRC-SPU-10 to stand-alone BB-LA6 battery charging cable.

C991618

Hand-crank generator to stand-alone BB-LA6 battery charging cable.

2. Carrying Accessories

a. ST-138

b. CW-503

ST-138

Carrying harness with canvas bag for the PRC1099A transceiver.

CW-503

Canvas bag for use in carrying accessory items like antennas, etc. Use with the ST-138.

3. Audio Accessories

All PRC1099A audio accessories are terminated with 5-pin, twist-lock, and military-style connectors that are interchangeable among Datron military products.

a. DSP9000-HS

- b. MHS
- c. H-250/U
- d. H-140/U
- e. H3M
- f. KYR
- g. LS-R
- h. SHS

DSP9000-HS **THIS ITEM IS USML*

High-level, digital, encrypting handset. Normal operation is fully automatic; user simply selects Plain or cipher mode. It contains a three-tiered key system (system, network and local keys) with provision for up to 200 local encryption keys. All three levels of keys can be programmed into a smart module (701450) with the 7000CMS crypto management system. The network and local keys can be programmed with the DSP9000 ciphering system. The keys are loaded into the handset from the smart module. Compatible with the 7000ENCR. Order cable C992029 for use with the DSP9000. For more information on key management systems, contact your Datron Sales Representative.

MHS

H-189/U military handset. Repairable.

H-250/U

Noise canceling, non-repairable version of MHS.

H-140/U

Ruggedized headphones.

H3M

Headset-boom microphone. Single earphone low profile. With clip-on push-to-talk switch.

KYR

Morse key with 36 inch (0.9m) cord.

LS-R

Loudspeaker with 5-pin MIL connector.

SHS

Scrambling handset with 5-pin MIL connector. Order SHS-KIT programming kit separately.

4. Manpack Antennas

**USML REQUIRES WRITTEN AUTHORIZATION FROM THE U.S. DEPARTMENT OF STATE PRIOR TO EXPORT OR RE-EXPORT*

a. Whip Antennas

1. AT-271A/U

AT-271A/U

Folding, multi-sectional, whip antenna with AB-591/U flexible antenna base, 10 ft (3 m). Connects directly to the whip antenna port on the transceiver. Uses internal radio antenna tuner.

b. Tactical dipole, long wire and portable antennas

1. ALD

2. ALD-R

3. ALW-R

4. NVISKIT

5. RA-PAS

ALD

Adjustable-length, dipole antenna kit. Includes 33 ft (10 m) RG-58/U feed line and throwing lines with weights for ease of antenna erection.

ALD-R

Ruggedized, adjustable-length, dipole antenna kit. Includes 33 ft (10 m) RG-58/U feed line and throwing lines with weights for ease of antenna erection. Comes with laminate carrying bag. Features superior mechanical characteristics.

ALW-R

Ruggedized, long-wire antenna kit, 100 ft (30.5 m). Includes 100 ft of antenna wire, 50 ft (15.2 m) counterpoise, and a long-wire adapter for connection to whip antenna port. Uses internal radio antenna tuner.

NVISKIT

Portable NVIS antenna kit consisting of the AS-2259/GR NVIS antenna and ground base with thumb screw connector. Uses internal radio antenna tuner. Order cable C992169 and AAW for interfacing to the whip antenna port.

c. Antenna Adapters

1. LWA

2. AAW

3. AGK

LWA

Long-wire adapter used for connection of PRC1099A whip antenna port to long-wire antennas.

AAW

Whip adapter and feed wire (includes 4 ft cable C992102) for direct connection of PRC1099A whip antenna port to RA-MAS, MAR-12, MAR-16 and MAR-16T whip antennas. Not required when external tuner is used.

PRC1099A Vehicular Accessories

1. Mounts and Adapters
2. RF Power Amplifiers
3. Mobile Antennas
4. High Power Antenna Tuners
5. External Loudspeaker
6. Mobile Power Accessories
7. Vehicle Installation Kit



1. Mounts and Adapters

Mounts for the PRC1099A include full-function vehicle adapters, simple mounting brackets with shock mounts, and mobile adapter plates.

a. Vehicle Adapters

1. MT-1099A-12
2. MT-1099A-24
3. MT1099E-24

MT-1099A-12

Vehicle adapter and mobile mount with integral shock mounts for installation of the PRC1099A transceiver into 12 Vdc vehicles. Unit provides power conditioning and surge/reverse polarity protection plus loudspeaker audio and interface to accessory RA100-12 power amplifier. Mounting dimensions identical to legacy U.S. standard MT-1029/VRC vehicle mount. Order C991580 power cable (vehicle battery to mount) and C991949 control cable (mount to radio) separately. For configuration details, see the PRC1099A System Configurations section below.

MT-1099A-24

Vehicle adapter and mobile mount with integral shock mounts for installation of the PRC1099A transceiver into 24 Vdc vehicles. Unit provides power conditioning and surge/reverse polarity protection plus loudspeaker audio and interface to accessory RA100-24 power amplifier. Has internal 24/12 Vdc converter which supplies radio input power. Dimensions identical to legacy U.S. standard MT-1029/VRC vehicle mount. Order C991580 power cable and C991949 control cable separately. For configuration details, see the PRC1099A System Configurations section below.

MT1099E-24

Vehicle adapter and mobile mount with integral shock mounts for installation of the PRC1099A transceiver into 24 Vdc vehicles. Unit has power conditioning, surge/reverse polarity protection, and under/over voltage protection. Has internal 24/12 Vdc converter to power radio, loudspeaker audio and RA100-24 interface. Has provision for connection of external data device (RS232 port). Dimensions identical to legacy U.S. standard MT-1029/VRC vehicle mount. Order C991580 power cable and C991949 control cable separately.

b. Mounting Kits and Shock Mounts

1. RA100-MM
2. RAT1000-SM
3. RAT7000B-SM
4. UNIV-SM

RA100-MM

Mounting kit to mount the RA100 amplifier to the MT-1099A-series mounts.

RAT1000-SM

Shock mount for RAT1000C tuner.

RAT7000B-SM

Shock mount for the RAT7000B tuner.

2. RF High Power Amplifiers

- a. RA100-12
- b. RA100-24

RA100-12

100W PEP/AVG, RF power amplifier, 1.6-30 MHz, for use in +12Vdc vehicles. Ruggedized package compatible with 1099A and 1099E series vehicle adapter mounts (must order RA100-MM separately) and PRC1099A manpack transceiver. Amplifier operates from nominal 12 Vdc power source. Order C991575 RF cable (radio to amplifier) and C991585 control cable (mount to amplifier) separately. For configuration details, see the PRC1099A System Configurations section below.

RA100-24

100W PEP/AVG, RF power amplifier, 1.6-30 MHz for use in +24Vdc vehicles. Identical to the RA100-12, but requires 24 Vdc power source. Order C991575 RF cable and C991585 control cable separately. For configuration details, see the PRC1099A System Configurations section below.

3. Mobile Antennas

- a. MAR-12

b. MAR-16

c. MAR-16T

d. RA-MAS

MAR-12

Identical to the MAR-16 but with a length of 12 ft (3.6m).

MAR-16

Four section, heavy-duty fiberglass military whip with flexible spring mobile base and mobile mounting bracket. Can be tied down horizontally to support NVIS communications. 16 ft (4.8m) length. Requires antenna tuner.

MAR-16T

Identical to MAR-16 with tilt whip adapter on flexible spring base. Allows locking antenna into four different positions. Provides NVIS coverage when in tilted position.

RA-MAS

Mobile antenna system. Four section, heavy-duty fiberglass military whip with rigid mobile base and mobile mounting bracket. 4.8m (16 ft.) tall. Requires an antenna tuner.

4. Automatic Antenna Tuners

a. RAT7000B

RAT7000B

Automatic antenna tuner in ruggedized, immersible case, 100W. Operates with whip and long-wire antennas. Includes VSWR monitoring and rapid digital tuning capability. Offers 512 memory channels for silent tune applications. Supplied with mobile mount (w/o shocks) and C991620 0.5m antenna lead. Order C991505 RF cable and C992142 control and power cable separately (specify cable lengths). Optional shock mounted tray available (RAT7000B-SM).

5. External Loudspeaker

a. LS-R

LS-R

External loudspeaker for monitoring of the PRC1099A that connects to the radio audio port or MT-1099A-series mount.

6. Mobile Power Accessories

The following are alternative power sources for the PRC1099A in mobile configurations or when the vehicle has come into the depot and the user wants to use other than battery power for the system.

a. C991659

b. PRC-CA12V

C991659

Cable allows charging of two BB-LA6 batteries from a 12 Vdc nominal vehicle battery or other 13.8 Vdc source.

PRC-CA12V

Cable allows operation of radio from 12 Vdc vehicle battery or other 12 Vdc source. Allows charging of BB-LA6 battery installed in radio from 12 Vdc vehicle battery or other 12 Vdc source.

7. Vehicle Installation Kit

a. 701579

Installation kit for single vehicle.

PRC1099A Fixed Station Power Accessories

1. UPF7000A-12

2. UPF7000A-12-220

3. UPF7000A-28

4. UPF7000A-28-220

UPF7000A-12

Continuous duty, 12 Vdc, power supply designed to power a radio system in a 20W or 100W fixed station configuration. Includes standard NEMA 5-15P 110Vac plug on power cable. Automatic input voltage selection. Accepts 85-240 VAC, 47-63 Hz input. Packaged in rugged waterproof case. Order C991614 dc power cable separately.

UPF7000A-12-220

Same as UPF7000A-12 except with standard NEMA 6-15P 220 VAC plug on power cable. Order C991614 dc power cable separately.

UPF7000A-28

Continuous duty (FSK) 28 Vdc power supply designed to power PRC1099A in 100W configuration with RA100-24. Automatic input voltage selection. Accepts 85-240 VAC, 47-63 Hz input. Packaged in rugged waterproof case. Order C991511 dc power cable separately. Order C991614 dc power cable separately.

UPF7000A-28-220

Same as UPF7000A-28 except with standard NEMA 6-15P 220 VAC plug on power cable. Order C991614 dc power cable separately.

PRC1099A Software Applications

1. RC2-NG

RC2-NG

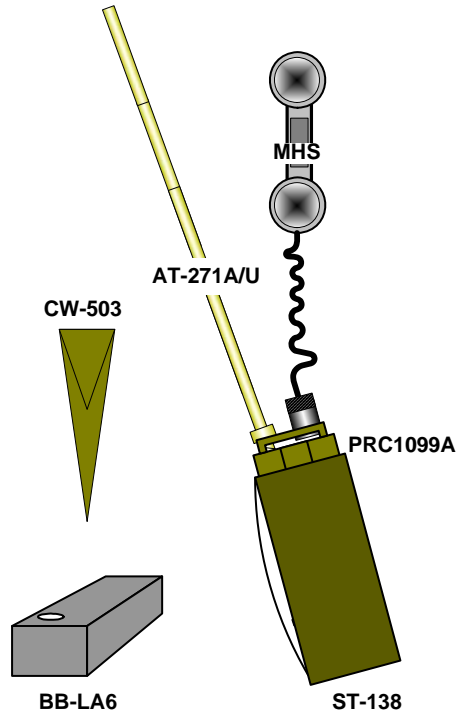
RC2-NG radio control software provides a fast and easy way to set PRC1099A radio operating parameters (mode, power, squelch, etc.) and ALE (Automatic Link Establishment) settings (frequencies, call signs, scan groups, sounding, etc.). RC2-NG is user-friendly and provides the ability to initiate ALE Voice Calls and Chat links. It runs on a standard desktop or notebook computer. For the PRC1099A radio the 1099ALE option is required. For vehicular use, order the MT1099E-24 mount. For use with manpack radio order cable C992326. For use with radio in mount order cable C992249.

PRC1099A Tactical Systems

Various system configurations are available using the PRC1099A as the core. Both +12 Vdc and +24 Vdc vehicles can be accommodated. A simple “building block” approach allows the user to configure a system for 20W or 100W RF power output with various accessories. Some of the more common systems are shown in the following pages with all components and interconnecting cables.

PRC1099A System Descriptions	System Part Number
20W, 12 Vdc, HF Manpack Voice System	PRC1099A-SYS-M20
20W, 12 Vdc, HF Mobile Voice System	PRC1099A-SYS-V20-12
20W, 24 Vdc, HF Mobile Voice System	PRC1099A-SYS-V20-24
100W, 12 Vdc, HF Mobile Voice System	PRC1099A-SYS-V100-12
100W, 24 Vdc, HF Mobile Voice System	PRC1099A-SYS-V100-24

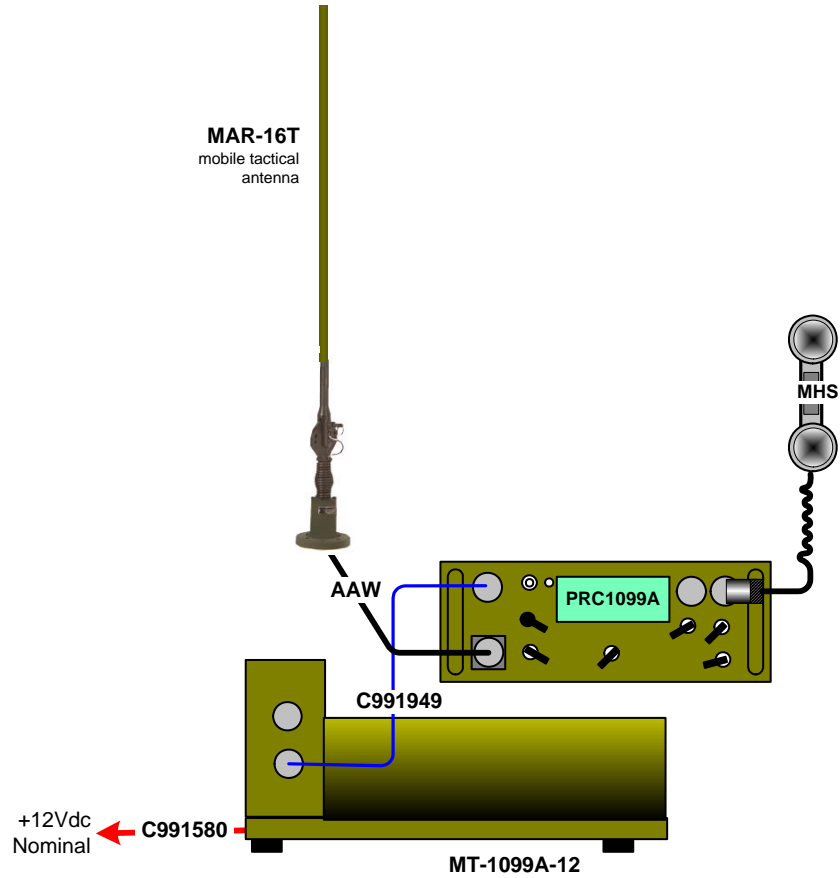
PRC1099A-SYS-M20. 20W, 12VDC, HF Manpack Voice System



PRC1099A-SYS-M20. 20W, 12Vdc, HF Manpack Voice System			
Item	Quantity	DWC P/N	Description
1	1	PRC1099A	Transceiver, HF SSB, 20W, 1.6-30 MHz.
2	1	MHS	Handset, military style, H-189/U-type.
3	1	BB-LA6	Battery, lead acid, 12VDC nominal.
4	1	AT-271A/U	Antenna, whip, folding, 10 ft (3m).
5		ST-138	Carry harness with canvas bag for radio.
6	1	CW-503	Carry bag for accessories.

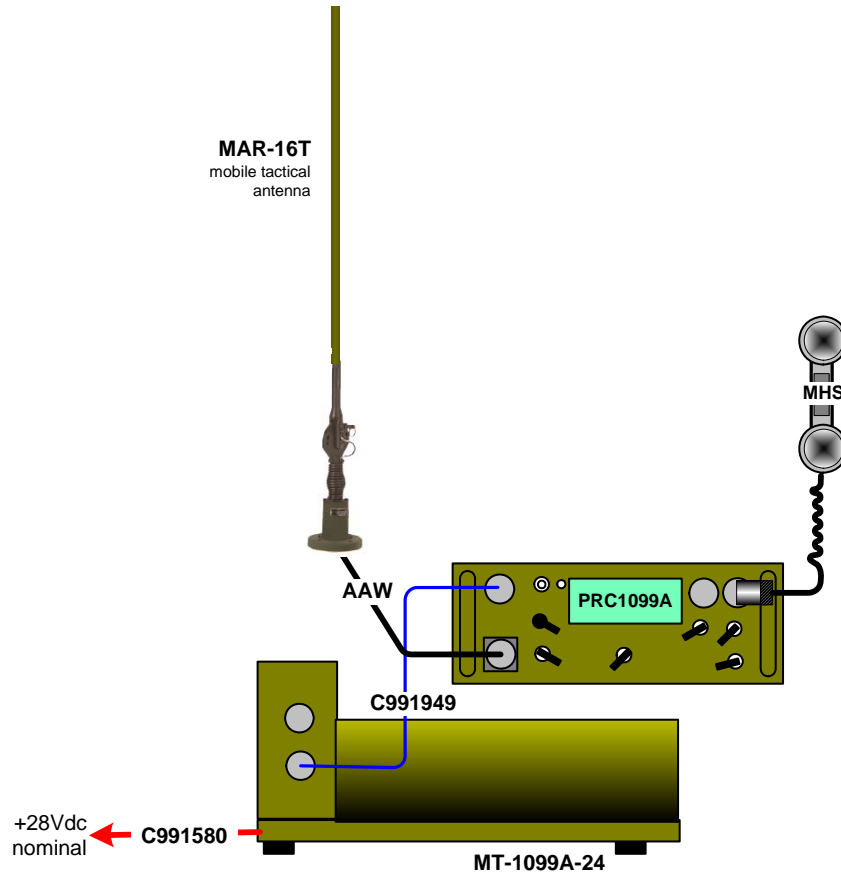
Note:
 Order battery charger separately.

PRC1099A-SYS-V20-12. 20W, 12Vdc, HF Mobile Voice System



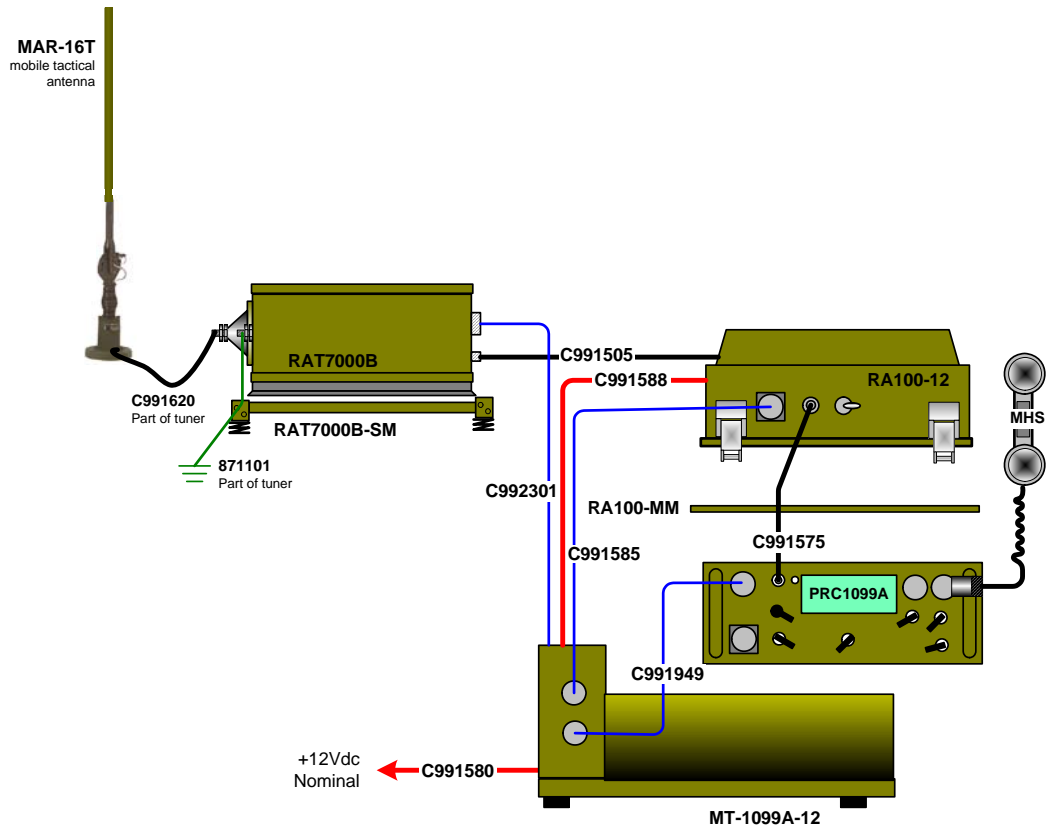
PRC1099A-SYS-V20-12. 20W, 12Vdc, HF Mobile Voice System			
Item	Quantity	DWC P/N	Description
1	1	PRC1099A	Transceiver, HF SSB, 20W, 1.6-30 MHz.
	1	MHS	Handset, military style, H-189/U-type.
	1	MT-1099A-12	Vehicle adapter and mobile mount, 12 Vdc. With integrated loudspeaker.
2	1	MAR-16T	Antenna, whip, 4.8m (16 ft.), fiberglass with flexible mobile mount.
4	1	AAW	Adapter, whip antenna, includes C992102 antenna lead-in wire.
5		C991580	Cable, DC power, MT-1099A-12 to battery.
6	1	C991949	Cable, control + power, PRC1099A to MT-1099A-12.
7	1	701579	Installation kit, single vehicle.

PRC1099A-SYS-V20-24. 20W, 24Vdc, HF Mobile Voice System



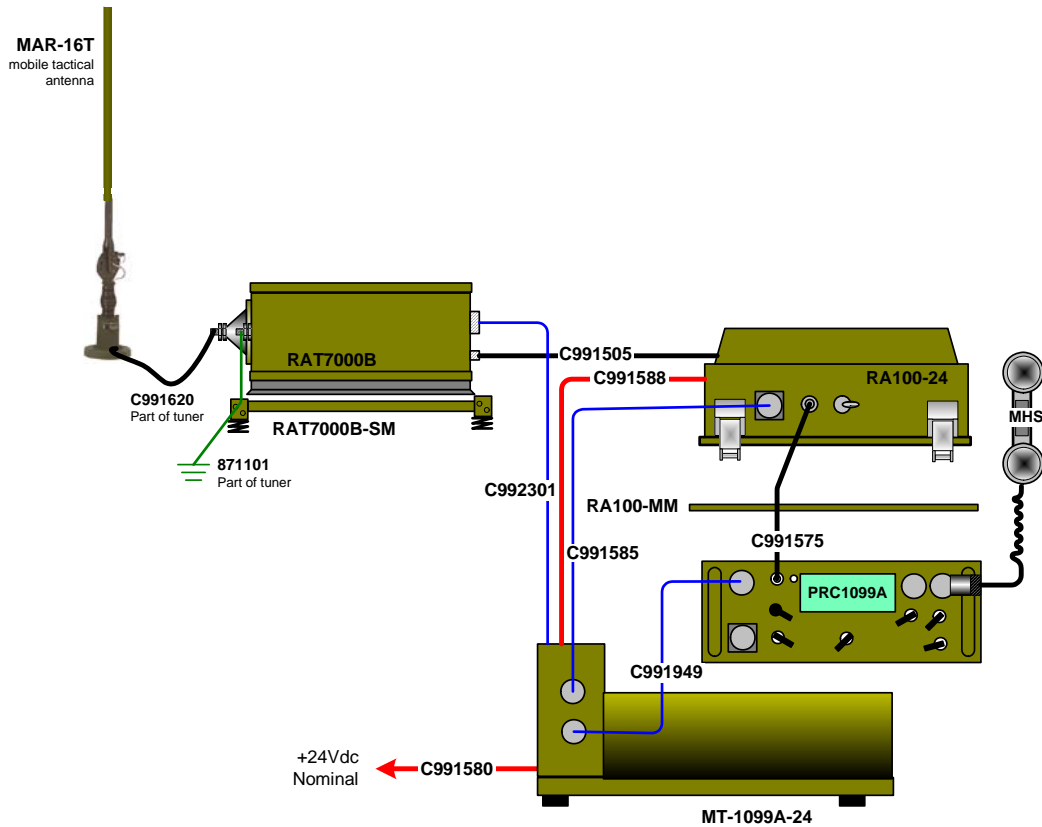
PRC1099A-SYS-V20-24. 20W, 24Vdc, HF Mobile Voice System			
Item	Quantity	DWC P/N	Description
1	1	PRC1099A	Transceiver, HF SSB, 20W, 1.6-30 MHz.
	1	MHS	Handset, military style, H-189/U-type.
	1	MT-1099A-24	Vehicle adapter and mobile mount, 24 Vdc. With integrated loudspeaker.
2	1	MAR-16T	Antenna, whip, 4.8m (16 ft.), fiberglass with flexible mobile mount.
4	1	AAW	Adapter, whip antenna, includes C992102 antenna lead-in wire.
5		C991580	Cable, DC power, MT-1099A-24 to battery.
6	1	C991949	Cable, control + power, PRC1099A to MT-1099A-24.
7	1	701579	Installation kit, single vehicle.

PRC1099A-SYS-V100-12. 100W, 12 Vdc, HF Mobile Voice System



PRC1099A-SYS-V100-12. 100W, 12 Vdc, HF Mobile Voice System			
Item	Quantity	DWC P/N	Description
1	1	PRC1099A	Transceiver HF SSB, 20W, 1.6-30 MHz.
2	1	MHS	Handset, military style, H-189/U-type.
3	1	MT-1099A-12	Vehicle Adapter and Mobile Mount, 12 Vdc. With loudspeaker.
4	1	RA100-12	Amplifier, linear, HF, 100W, 1.6-30 MHz, 12 Vdc.
5	1	RA100-MM	Mounting bracket, RA100-12.
6	1	RAT7000B	Antenna tuner, automatic, 150W. Includes C991620 antenna lead.
7	1	RAT7000B-SM	Shock mount, RAT7000B.
8	1	MAR-16T	Antenna, whip, 4.8m (16 ft.), fiberglass with flexible mobile mount.
9	1	C991505	Cable, RF, RA100-12 to RAT7000B.
10	1	C991575	Cable, RF, PRC1099A to RA100-12.
11	1	C991580	Cable, DC power, MT-1099A-12 to Power Source.
12	1	C991585	Cable, control, MT-1099A-12 to RA100-12.
13	1	C991588	Cable, DC power, MT-1099A-12 to RA100-12.
14	1	C991949	Cable, control + power, PRC1099A to MT-1099A-12.
15	1	C992301	Cable, control, MT-1099A-12 to RAT7000B.
16	1	701579	Installation kit, single vehicle

PRC1099A-SYS-V100-24. 100W, 24 Vdc, HF Mobile Voice System



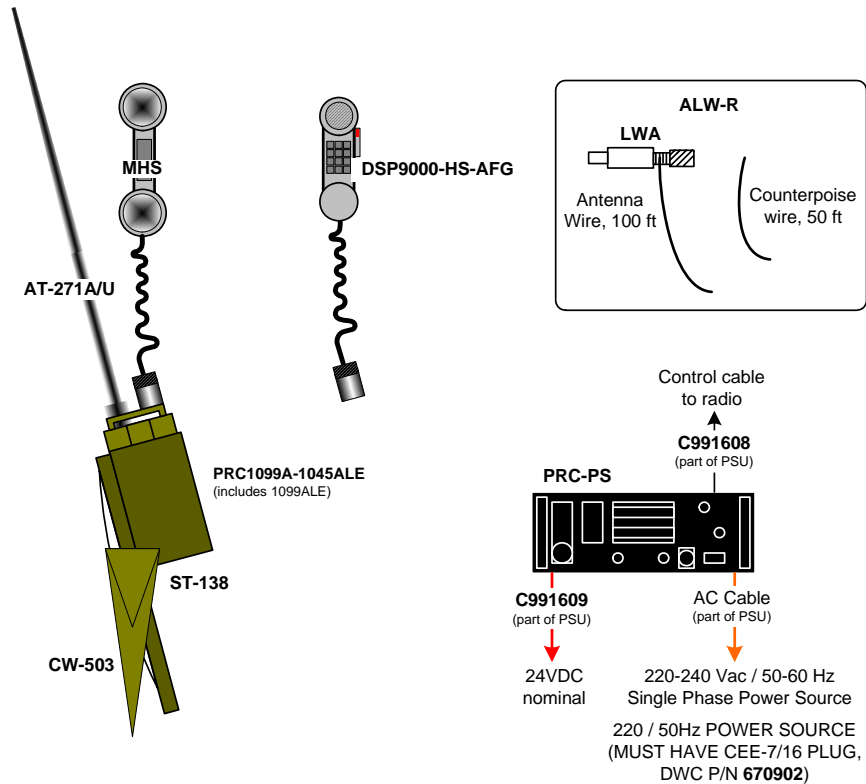
PRC1099A-SYS-V100-24. 100W, 24 Vdc, HF Mobile Voice System			
Item	Quantity	DWC P/N	Description
1	1	PRC1099A	Transceiver HF SSB, 20W, 1.6-30 MHz.
2	1	MHS	Handset, military style, H-189/U-type.
3	1	MT-1099A-24	Vehicle Adapter and Mobile Mount, 24 Vdc. With loudspeaker.
4	1	RA100-24	Amplifier, linear, HF , 100W, 1.6-30 MHz, 24 Vdc.
5	1	RA100-MM	Mounting bracket, RA100-12.
6	1	RAT7000B	Antenna tuner, automatic, 150W. Includes C991620 antenna lead.
7	1	RAT7000B-SM	Shock mount, RAT7000B.
8	1	MAR-16T	Antenna, whip, 4.8m (16 ft.), fiberglass with flexible mobile mount.
9	1	C991505	Cable, RF, RA100-24 to RAT7000B.
10	1	C991575	Cable, RF, PRC1099A to RA100-24.
11	1	C991580	Cable, DC power, MT-1099A-24 to Power Source.
12	1	C991585	Cable, control, MT-1099A-24 to RA100-24.
13	1	C991588	Cable, DC power, MT-1099A-24 to RA100-24.
14	1	C991949	Cable, control + power, PRC1099A to MT-1099A-24.
15	1	C992301	Cable, control, MT-1099A-24 to RAT7000B.
16	1	701579	Installation kit, single vehicle

PRC1099A Legacy Systems

Legacy Systems are shown in the table below.

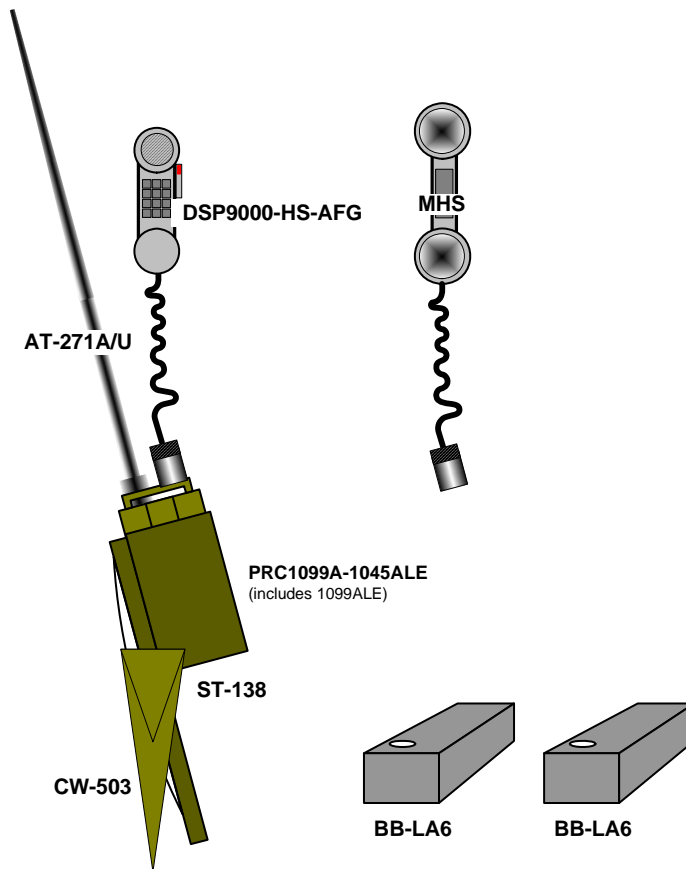
PRC1099A System Descriptions	System Part Number
20W, 12 Vdc, HF Manpack Voice System with Whip Antenna, Long Wire Antenna Encrypting Handset, FED-STD-1045A ALE and Power Supply/Battery Charger	PRC1099A-SYS100M
20W, 12 Vdc, HF Manpack Voice System with Whip Antenna, Encrypting Handset and FED-STD-1045A ALE	PRC1099A-SYS105M

PRC1099A-SYS100M. 20W, 12 Vdc, HF Manpack Voice System with Whip Antenna, Long Wire Antenna, Encrypting Handset, FED-STD-1045A ALE and Power Supply/Battery Charger



PRC1099A-SYS100M. 20W, 12 Vdc, HF Manpack Voice System with Whip Antenna, Long Wire Antenna, Encrypting Handset, FED-STD-1045A ALE and Power Supply/Battery Charger			
Item	Quantity	DWC P/N	Description
1	1	PRC1099A-1045ALE	Transceiver, HF SSB, 20W, 1.6-30 MHz, with FED-STD-1045A ALE.
2	1	MHS	Handset, military style, H-189/U-type.
3	1	AT-271A/U	Antenna, whip, folding, 10 ft (3m).
4	1	ST-138	Carry harness with canvas bag for radio.
5	1	CW-503	Carry bag for accessories.
6	1	PRC-PS	Power supply/battery charger, 220VAC.
7	1	ALW-R	Long wire antenna kit, with long wire adapter.
8	1	670902	AC plug, CEE 7/16
9	1	DSP9000-HS-AFG	Encrypting Handset, Afghan version.
10	1	PRC1099A-MSOPDA	PRC1099A Operator Manual, in Dari.

PRC1099A-SYS105M. 20W, 12 Vdc, HF Manpack Voice System with Whip Antenna, Encrypting Handset and FED-STD-1045A ALE



PRC1099A-SYS100M. 20W, 12 Vdc, HF Manpack Voice System with Whip Antenna, Encrypting Handset and FED-STD-1045ALE			
Item	Quantity	DWC P/N	Description
1	1	PRC1099A-1045ALE	Transceiver, HF SSB, 20W, 1.6-30 MHz, with FED-STD-1045A ALE.
2	1	DSP9000-HS-AFG	Encrypting Handset, Afghan version.
3	1	MHS	Handset, military style, H-189/U-type.
4	1	AT-271A/U	Antenna, whip, folding, 10 ft (3m).
5	1	ST-138	Carry harness with canvas bag for radio.
6	1	CW-503	Carry bag for accessories.
7	2	BB-LA6	Battery, Lead Calcium, 12VDC, 6AH.
8	1	PRC1099A-MSOPDA	PRC1099A Operator Manual, in Dari.

PRC1099A Standard Spare Equipment

Datron offers spare kits for all of its 1099A-series equipment. Standard spares are broken down into three complementary kits: MK, MRK, PSK. These kits are unique and do not include parts which are supplied as part of another kit.

- a. Module kit
- b. Module repair kit
- c. Part spares kit

Module Kit (MK)

A module kit contains one complete set of all replaceable printed circuit subassemblies in the product. These are the items which allow the equipment to be repaired by identifying and replacing modules in order to minimize down time. In general, a technician should be able to replace one of these subassemblies using common tools. The number of module kits required depends on the maintenance plan for the equipment. Typically, 2 module kits are held at each field service repair site – 1 for replacements and the other for backup while the defective module is returned to the factory or main service depot for repair.

Module Repair Kit (MRK)

A module repair kit contains all of the spare piece parts necessary to service the printed circuit assemblies in the product. It is designed to support up to 10 pieces of the product for 3 to 5 years. If the maintenance plan is to return all subassemblies to the factory for repair, then the MRKs are not required for equipment support.

Part Spares Kit (PSK)

A part spares kit contains the spare parts (except for basic hardware and wire) necessary to service the product with the exception of the printed circuit assemblies. It therefore contains those spares not contained in the MRK (e.g., chassis parts and front panel components). It is designed to support up to 10 pieces of the product for 3 to 5 years.

DWC Product P/N	Module Kit (-MK)	Module Repair Kit(-MRK)	Parts Spare Kit (-PSK)
MT-1099A-12	>	>	
MT-1099A-24	>	>	
MT1099E-24	>		
PRC1099A	>	>	>
RAT7000B	>	>	>
PRC-BC4	>	>	>
PRC-PS	>	>	>
RA100-12	>	>	>
RA100-24	>	>	>
RAT1000C	>		

UPF7000A-12			>
UPF7000A-28			>

Notes:

1. To order an individual spares kit, add the appropriate suffix (i.e., -MK, -MRK, -PSK) to the product part number
2. When MK (Module Kits) and MRK (Module Repair Kits) are not listed, they are not available and are not required.
3. System spares do not include spare handsets, microphones, antennas or other accessories that may be required for long-term support of the system.

PRC1099A Manuals

All Datron products are shipped with an operator’s manual (-MSOP). However, due to their simplicity, some might be combined operator and technical manuals. When available, technical manuals are sold separately (-MS). Please contact the factory for more details.

DWC Product P/N	Operator (-MSOP) supplied with product	Technical (-MS) sold separately	Combined (-MS) supplied with product
ALD			>
ALD-R			>
MT-1099A-12			>
MT-1099A-24			>
MT1099E-24			>
PRC1099A	>	>	
PRC1099A-IP	>		
PRC-BC4			>
PRC-HC			>
PRC-PS			>
PRC-SPU-10			>
RA100-12	>	>	
RA100-24	>	>	

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RA400-99	>	>	
RAT1000C	➤	➤	>
RAT7000B			>

Note: for special system documentation, contact your Datron Sales Representative.