

FM 24-24

**AN/PRC-119(V)1, AN/VRC-87(V)2, AN/VRC-88(V)3,
AN/VRC-89(V)4, AN/VRC-90(V)5, AN/VRC-91(V)6,
and AN/VRC-92(V)7
SINGGARS Radio Sets**

NSN: 5820-01-151-9915 (AN/PRC-119(V)1)
5820-01-151-9916 (AN/VRC-87(V)2)
5820-01-151-9917 (AN/VRC-88(V)3)
5820-01-151-9918 (AN/VRC-89(V)4)
5820-01-151-9919 (AN/VRC-90(V)5)
5820-01-151-9920 (AN/VRC-91(V)6)
5820-01-151-9921 (AN/VRC-92(V)7)

Reference: TM 11-5820-890-10-1
TM 11-5820-890-20-2

General Information

Single-Channel Ground and Airborne Radio Systems (SINGGARS) is a family of VHF-FM radio sets designed to meet the Army's tactical communications requirements under the new Army operations doctrine. SINGGARS is replacing the AN/PRC-77 and the AN/VRC-12 series radio sets. It is designed for simple, quick operation using a 16-element keypad for push-button tuning. SINGGARS is capable of short-range or long-range operation for voice, frequency shift-keying (FSK), or digital data communications. It can be used for single-channel operation or in a jam-resistant, frequency hopping mode which can be changed as needed. SINGGARS has a built-in self test with visual and audio read back. Major components and equipment configurations are shown in the chart on the following page.

Technical Characteristics

Frequency Range 30 to 88 MHz
Number of Channels 2,320 (spaced every 25 kHz) includes eight channels
that can be preset for single-channel operation or
eight that can be preset for frequency hopping operation
Power Input 12 V DC, manpack; 28 V DC, vehicular/aircraft
Power Output 5 W, and up to 50 W with power amplifier
Antenna See the following chart

SINGGARS Radio Sets

SINGGARS COMPONENTS			Receiver/Transmitter Vehicle Application Vehicle Antenna Manpack Antenna Battery Case Power Amplifier					
Version	Nomenclature	Function	Components					Replaces
(V1)	AN/PRC-119	Manpack	1			1	1	AN/PRC-25, AN/PRC-77
(V2)	AN/VRC-87	Vehicle, Short Range	1	1	1			AN/VRC-53, AN/VRC-64
(V3)	AN/VRC-88	Vehicle, Short Range/ Dismount	1	1	1	1	1	AN/GRC-125, AN/GRC-160
(V4)	AN/VRC-89	Vehicle, Long Range/ Vehicle, Short Range	2	1	2		1	AN/VRC-12, AN/VRC-47
(V5)	AN/VRC-90	Vehicle, Long Range	1	1	1		1	AN/VRC-43, AN/VRC-46
(V6)	AN/VRC-91	Vehicle, Long Range/ Vehicle, Short Range/ Dismount	2	1	2	1	1	AN/VRC-46 and AN/GRC-160
(V7)	AN/VRC-92	Dual/Vehicle, Long Range	2	1	2		2	AN/VRC-45, AN/VRC-49

Ancillary Items:
 Receiver-Transmitter RT-1439(P)/VRC
 Data Adapter MX-10506()/VRC
 Electronic Counter-Countermeasure Module C-11290()/VRC
 Intervehicular Remote Control Unit C-11291()/VRC

