

**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	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

