

RF-7800M-AD250
AN/PRC-117G DUAL
CHANNEL ADAPTER
PLATE FOR AN/VRC-103
(AM-7588) 50-WATT
MULTIBAND VEHICULAR
AMPLIFIER ADAPTER
(VAA)

A multi-channel upgrade

for existing 50-watt

vehicular installations

The RF-7800M-AD250 Dual Channel Adapter Plate interfaces up to two JTEL-certified Software Communications Architecture (SCA) AN/PRC-117G(V)1(C) radios to an AM-7588 power amplifier (PA). The adapter allows existing installations of the AN/VRC-103 to update to dual channel JTRS-level multiband and wideband vehicular capabilities, while maintaining the legacy capabilities of traditional multiband vehicular radio systems.

The adapter also allows AN/PRC-117G transceivers to support the same field-proven capabilities as the AN/VRC-103, including SINCGARS and Havequick III ECCM, with full-circuit protection, DC filtering, VHF/Low FM (30-90 MHz) and UHF (225-400 MHz) collocation filters, and SATCOM Low Noise Amplifier (LNA) along with wideband communications from 225 to 2000 MHz.

With two channels, the adapter offers communications flexibility for a variety of missions. The first channel provides DC input power and up to 50 watts output power in the 30 to 512 MHz narrowband range, and up to 20 watts output power in the 225 to 2000 MHz wideband range. The second channel provides DC input power with up to 10 watts in the 30 to 512 MHz range, 20 watts in the SATCOM band, and 20 watts in the 225 to 2000 MHz wideband range.

The adapter includes a locking mechanism, RF cables and shock mount upgrade. AM-7588 accessories can be used with the adapter, including, Tactical Speakers, and X-Wing SATCOM-on-the-Move (SOTM), VHF/UHF Multiband Vehicular Whip and VHF/UHF GPS Multiband Vehicular Whip Antennas.



Specifications for the RF-7800M-AD250

Power output		
	Channel 1	Channel 2
VHF	50 watts	10 watts
UHF	50 watts	10 watts
SATCOM	50 watts	20 watts
Wideband	20 watts	20 watts



The adapter plate supports single and dual channel operation, allowing existing AM-7588 installations to upgrade to the JTEL- certified Software Communications Architecture (SCA) of the AN/PRC-117G(V)1(C). This upgrade provides JTRS-level multiband and wideband vehicular capabilities while maintaining the legacy capabilities of traditional vehicular radio systems.



The dual channel configuration combines the advanced features of the AN/PRC-117G(V)1(C) with the proven performance of the AM-7588 to provide legacy multiband capabilities, secure line-of-sight (LOS) wideband networking, and global beyond-line-of-sight (BLOS) connectivity.

Accessories	
RF-3184-AT320	225-450 MHz Wideband Vehicular Antenna
RF-3186-AT320	512-2000 MHz Wideband Vehicular Antenna
10513-0810	Coaxial Cable, Type N to Type N
RF-3183-AT013 or RF-390-AT001	30-512 MHz Broadband Vehicular Antenna with Diplexer
RF-3183-AT015 or RF-390-AT005	30-512 MHz Broadband Vehicular Antenna
10369-7212 (RG-213)	Coaxial Cable BNC to BNC
12011-0120 (RG400)	Coaxial Cable TNC to BNC
12006-9001-01	SATCOM X-Wing Vehicular Antenna
10369-7211 (RG-213) or 10513-0811 (LMR 400DB)	Coaxial Cable, BNC to Type N
RF-3071-AT230	L1/L2 Active GPS, Vehicular Antenna with Cable
RF-5980-SA001	Tactical Amplifier/Speaker
10535-0706-A009	Speaker to 4-pin MIL power connector
10535-0707-A009	Speaker Audio Cable

