



MOTOROLA

SPECTRA

MOBILE RADIO FOR CONVENTIONAL OPERATION

Spectra conventional mobile radio... when advanced two-way communication is important. When you need durability, easy operation, and fast lock scan capabilities all at one affordable price, the choice is simple... Spectra radio.

The technologically advanced Spectra radio offers you broadband capabilities, providing true communications anywhere within the appropriate range. The radio features an alphanumeric display which allows you to name channels in plain English. The control unit's ability to display names and numbers adds a visual information

dimension. The result... operator time is spent productively rather than on training.

The Spectra radio can accommodate a multitude of changes quickly and inexpensively. When mode names, scan lists, or frequently used parameters need updating, they can be changed via the front control panel on most Spectra models. Each Spectra radio is built to withstand harsh environments such as blowing rain, salt fog, sand and dust. The radios

conform to MIL-STD-810E, the Department of Defense's most rigorous radio standards. And the radios must pass Motorola's own stringent Accelerated Life Test, which simulates five years of intensive field stress. You are ensured durability and reliable communications, whether you work in heavy construction, tough emergency situations or demanding public service environments.



MOBILE RADIO
IN A CLASS
BY ITSELF

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Performance Specifications / General

Channel Capacity:		128 Modes (A5, A7)				
Dimensions:		Mid Power: 2.0" H x 7.0" W x 8.6" L High Power: 2.0" H x 9.25" W x 12.9" L				
Weight:		Mid Power: 5.5 lbs. (2.5 kg) High Power: 10.65 lbs. (4.8 kg)				
Metering:		None: All adjustments and alignments are performed electronically using an IBM Personal Computer, a Radio Interface Box (RIB) and the radio service software.				
Model Series	Frequency (MHz)	Operation	Minimum RF Power Output	Maximum Battery Drain		
				Standby @ 13.8V	Receive at Rated Audio @ 13.8V	Transmit @ Rated Power
D43KMA D43KMA	136-162 MHz 146-174 MHz	12V DC Negative Ground	25-50W Variable	.5A	2.5A	13A
D44KMA D44KMA	403-433 MHz 450-482 MHz 482-512 MHz	12V DC Negative Ground	20-40W Variable	.5A	2.5A	12.5A
T83FWA T83FWA	136-162 MHz 146-174 MHz	12V DC Negative Ground	50-110W Variable	.6A	3.6A	27A
T84FWA T84FWA	450-482 MHz	12V DC Negative Ground	50-110W Variable	.6A	3.6A	31A
D37KMA D37KMA	896-902 MHz 935-941 MHz	12V DC Negative Ground	30 Watts	.5A	2.5A	14.5A
D45KMA D45KMA	806-824 MHz 851-869 MHz*	12V DC Negative Ground	35 Watts**	.5A	2.5A	13.5A

*Operation from 821-824 MHz and 866-869 MHz is on FCC Designated Mutual Aid Frequencies Only. Reduced Deviation on these frequencies, except in Test Mode.

**35 Watts in Talkaround.

Transmitter

Output Impedance:	50 Ohms
Spurious & Harmonics:	High Power: More than -85 dBC* (per EIA spec. RS152B) Mid Power VHF: -75 dBC UHF: 900 MHz: -70 dBC
Frequency Stability:	± 0.0005%; optional ± 0.0002%; -30°C to +60°C 800 MHz: ± 0.00025, 900 MHz: ± 0.00015
Modulation:	16K0F3E, 16K0F1D, 16K0F2D, 20K0F1E
Audio Sensitivity:	0.080V ± 3 dB for 60% max. deviation @ 1000 Hz
FM Hum and Noise:	VHF: -55 dB; UHF: -45 dB; 800 & 900 MHz: -40 dB
Audio Response:	EIA
Audio Distortion:	2% at 1000 Hz at 60% deviation; 800 MHz - 3%
Maximum Frequency Separation:	VHF: 28 MHz; UHF: 32 MHz; 800 MHz: 18 MHz; 900 MHz: 6 MHz
* -70 dBC @ 136-142 MHz (50-110W Only)	
Speaker	
Dimensions:	5.5" x 2.5" (14 x 6 cm)
Weight:	1.5 lbs. (.7 kg)
A5 & A7 Remote Mount Control Heads	
Dimensions:	2" H x 7" W x 2.5" L (5 x 18 x 6.4 cm)
Weight:	0.7 lbs. (.3 kg)

For further information contact:



Receiver

Receiver Profile:	VHF	UHF	800 MHz	900 MHz
Channel Spacing:	30 kHz	25 kHz	12.5 kHz	
Optional Pre-Amp:	yes no	yes no	no	no
Sensitivity: 20 dB Quietening: 12 dB (EIA SINAD):	25 µV 20 µV	.40 µV .30 µV	25 µV 20 µV	.40 µV .30 µV
EIA Selectivity:	-90 dB	-90 dB	-85 dB	-80 dB
EIA Intermodulation:	-80 dB	-85 dB	-80 dB	-70 dB
Spurious & Image Rejection:	-85 dB	-90 dB	-85 dB	-90 dB
Maximum Frequency Separation:	28 MHz	32 MHz	18 MHz	6 MHz
Input Impedance:	50 Ohms			
Audio Output:	Mid Power: 5 Watts at 2% Distortion High Power: 12 Watts at 2% Distortion		5 Watts at 3% Distortion	
Frequency Stability:	± 0.0005%; Optional ± 0.0002% -30°C to +60°C		± 0.00025%	± 0.00015%
FCC Designation:	VHF: AB289FT3732 25-50 watts AZ492FT3766 50-110 watts UHF: AB289FT4736 20-40 watts		AB289FT5719 35 watts	AB289FT5668 30 watts

* -83 dB @ adjacent channel



MOTOROLA

Winner 1988



Specifications subject to change without notice.

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