



SP-400 SERIES PORTABLE RADIO

- 1 OR 5 WATTS VHF /
1 OR 4 WATTS UHF /
4 OR 16 CHANNELS
- CTCSS/DCS
- VOX OPERATION
- TWO-TONE ENCODE /
DECODE
- BUILT-IN VOICE
INVERSION
SCRAMBLER
- MIL-STD 810 C/D/E
APPROVED



**ROCK
SOLID**

MIDLAND RADIO CORPORATION
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	VHF Models	UHF Models
Specifications	SP-410V / SP-430V	SP-420U / SP-440U

Frequency Range	148 - 174 MHz	440 - 470 MHz
Channels	4 / 16	
Channel Spacing	25 / 12.5 kHz	
PLL Step	5.0 / 6.25 kHz	
Channel Spread	26 MHz	30 MHz
CTCSS / DCS per channel	47 CTCSS / 104 DCS	
Antenna Impedance	50 Ω	
Operating Voltage	7.2 V Nominal	
Battery Life (with 1300 mAh NiMH battery)	8 hours @ 5 watts (90-5-5 DUTY CYCLE PER EIA RS-316B)	
Operating Temperature	-22°F to +140°F	-30°C to +60°C
Frequency Stability	± 2.5 ppm	
Dimensions with batteries (H x W x D)	5-15/16" x 2-1/2" x 1-13/16"	
Weight with 1650 mAh battery pack & antenna	13 oz.	
FCC Identifier	MMA80151	MMASP440
FCC Compliance	Parts 90, 15	Parts 90, 15

Receiver Specifications

Sensitivity (12dB S I N A D)	.25 μV	.30 μV
Selectivity	>75 dB @ 25 kHz >65 dB @ 12.5 kHz	>75 dB @ 25 kHz >65 dB @ 12.5 kHz
Intermodulation	75 dB	70 dB
Spurious Response	80 dB	70 dB
Audio Output (Method @ <10% THD Level)	500 mW @ 8 Ω	

Transmitter Specifications

RF Output (programmable by channel)	5 / 1 Watt(s) VHF	4 / 1 Watt(s) UHF
Spurious and Harmonic Emissions	70 dBc	
Modulation	14K0F3E, 11K0F3E	
FM Hum and Noise	> 50 dB @ 25 kHz > 45 dB @ 12.5 kHz	> 40 dB @ 25 kHz > 38 dB @ 12.5 kHz
Audio Distortion	5%	

MIL-STD Methods / Procedures
Standard 810C/D/E Method / Procedure

Vibration	514.5 / Proc. I, IV
Shock	516.5 / Proc. I, IV


Speaker Microphone
(QPA-1421)

Leather Carrying Case
w/ Swivel
(QPA-1491)

Nylon Carrying Case
w/ Belt Clip
(QPA-1495)

**VHF Antenna 150-162 &
162 - 174 MHz**
(ACC-101VLB & ACC-101VB)

VHF Antenna 6" Stud Mount
(CA-2506U) UHF (CA-5506B)

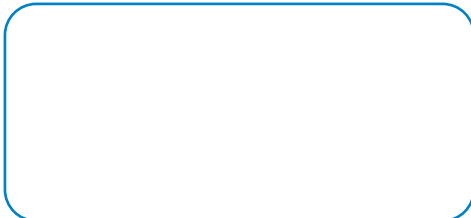
**UHF Antenna 440-
470 MHz** (ACC-104UW)

Weatherproof Speaker Mic
(70-M45WP)

1300 mAh NiMH
Battery (18-B02)

Single Unit Desktop "Smart"
Charger Base, cup required
(ACC-470)

FOR MORE INFORMATION, CONTACT:


WWW.MIDLANDRADIO.COM

 EMAIL: MAIL@MIDLANDRADIO.COM


Other Options Not Shown

 Stud-Mount to BNC Connector (70-1034)
 PC Programming Software, Win 95 or later (ACC-940CD)
 PC Programming Interface Cable (ACC-2400)
 Spring Loaded Belt Clip (81-BC1)
 SP-400 Series Service Manual (680-100-2018)