



# MIDLAND<sup>®</sup>

## SD-225 SERIES DATA RADIO



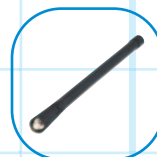
- 1 TO 5 WATTS TRANSMIT POWER, VHF & UHF
- UP TO 16 CHANNELS
- DB 9-PIN INTERFACE CONNECTOR
- PROGRAMMABLE CTCSS / DCS CODES PER CHANNEL
- LED STATUS INDICATOR
- ROHS (RESTRICTION OF HAZARDOUS SUBSTANCE) COMPLIANT
- PROGRAMMABLE 12.5 / 25 KHZ BY CHANNEL
- TRANSMIT TIME-OUT TIMER
- OPTIONAL AFSK / 1200 BAUD MODEM
- **CE** CERTIFIED



**General Specifications**

	<b>VHF Model SD-225V</b>	<b>UHF Model SD-225U1/SD-225U2</b>
--	------------------------------	--

Frequency Range	148 - 174 MHz	400 - 440 MHz / 440 - 480 MHz
Channels	1 of 16, dip switch selectable	
Channel Spacing (wide/narrow)	30, 25 / 15, 12.5 kHz	25 / 12.5 kHz
PLL Step	2.5 / 5.0 / 6.25 kHz	5.0 / 6.25 kHz
Channel Spread	26 MHz	40 MHz
Antenna Impedance	50 Ω	
Operating Voltage	9V DC to 18 DC, 12V Nominal	
Frequency Stability	±2.5 ppm	
Operating Temperature	-22°F to +140°F (-30°C to +60°C)	
Dimensions (H x W x D)	4-5/8" x 2-7/16" x 1-13/16" (117 x 62 x 30 mm)	
Weight	7.7 oz. (218 gm)	
FCC Identifier	MMASD225V2	MMASD225U2/U1
FCC Compliance	Parts: 22, 74, 90, 210	
Industry Canada Certification Number	3690A-195332	3690A-195333A
Current Consumption	Standby (muted) <45 mA Transmit 5 watts <2.0 A Transmit 1 watts <1.0 A Receiver <65 mA	
TX to RX / RX to TX Attack Time	<20 ms	
RSSI Squelch Attack Time	<5 ms	
Data Rate	9600 Baud Rate with TX Limiter	



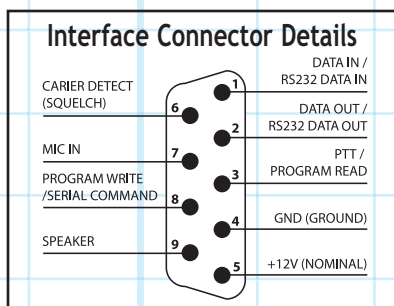
6" VHF ANTENNA,  
148-174 MHz,  
BNC CONNECTOR  
(CA-1506U) UN CUT



6" UHF ANTENNA,  
440-470 MHz,  
BNC CONNECTOR  
(CA-4506B)



PC PROGRAMMING KIT:  
SOFTWARE & CABLE  
WINDOWS® 95  
OR LATER  
(ACC-917 CD, SOFTWARE  
/ ACC-2025, CABLE)



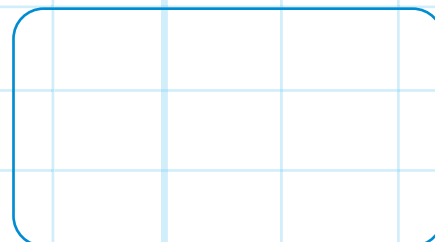
**Receiver Specifications**  
Measurement per ANSI / TIA / EIA-603

	VHF	UHF
Sensitivity RX (12 dB SINAD)	-118 dBm(0.28uV) @ nominal condition	-117 dBm(0.32uV) @ nominal condition
Sensitivity (Data SINAD)	-114 dBm @ nominal condition	-114 dBm @ nominal condition
Selectivity (wide/narrow)	73 dB / 65 dB	
Intermodulation	65 dB	
Spurious Rejection	70 dB	
RX Hum & Noise 25/12.5 kHz	40 dB	
Squelch Opening Range	RF Level for 6 to 14 dB SINAD	
Squelch Delay Time	5 ms Min, 20 ms Max	
Audio Output (method @ <10% THD Level)	2.5V @ 600 Ω	

**Transmitter Specifications**  
Measurement per ANSI / TIA / EIA-603

	VHF	UHF
RF Power Output High	5 Watts	
RF Power Output Low	1 Watt	
Spurious and Harmonic Emissions	60 dB	
Modulation	11K0F3E, 16K0F3E, 19K6F3D	
FM Hum and Noise	25 kHz 40 dB/12.5 kHz 36 dB	
Data Modulation Sensitivity	100 mV RMS @ 60% peak dev.	
Frequency Error	±2.5 ppm	
Frequency Deviation	25 kHz Peak ±2.5	12.5 kHz Peak ±5.0

FOR MORE INFORMATION, CONTACT:



MIDLAND RADIO CORPORATION  
5900 PARRETTA DRIVE  
KANSAS CITY, MO 64120 USA  
TEL: 816-241-8500  
FAX: 816-241-5713  
EMAIL: MAIL@MIDLANDRADIO.COM  
WWW.MIDLANDRADIO.COM

SD-225 SERIES DATA RADIO FEATURES AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.