

MIDLAND SYN-TECH™

29-54 MHz
1-50 and 50-110 Watts
Trunk-mount and
Under-dash Mobiles

Frequency Synthesized, Programmable/Reprogrammable Two-Way FM Mobile Radio



- Up to 80 programmable channels
- Programmable time-out timer
- Programmable busy channel lock-out
- Programmable scan options
- Adjustable RF power output
- Programmable tone-coded squelch

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General Specifications

Specifications subject to change without notice.

RF Power Output	Model Number	FCC Identification Numbers (Parts 15, 21, 90)	Current Drain @ 13.4 Vdc		
			Transmit (@ full power)	Receive (@ rated audio)	Standby (Standard)
Adjustable from 25 to 50 Watts (1-50 W, optional)	70-050* (under-dash)	AK58IF70050*	9.0 A	1.0 A	350 mA (varies with options)
	70-055* (trunk-mount)	AK58IF70055*			
Adjustable from 50 to 110 Watts	70-052* (under-dash)	AK58IF70052*	17.0 A		
	70-056* (trunk-mount)	AK58IF70056*			

*Add appropriate suffix (below) to Model Number and to FCC Identification Number if applicable.

International-Class Specifications

The electrical/electronic specifications of Midland's new frequency synthesized radio are designed to meet or exceed the important national and international standards issued world-wide for top performance anywhere on earth. Global specifications are just one more reason why we consider this radio to be in a class by itself—an international class.

(Model Number) Suffix*	Frequency Range	Number of Channels	Primary Power
A	29-37 MHz	Up to 80 Tx and 80 Rx frequencies (Scanning of up to 64 channels, optional)	12.2 to 15.0 Vdc (negative ground)
B	35-44 MHz		
C	40-54 MHz		

		Dimensions (HWD)	Weight	Approximate Shipping Weight	Approximate Shipping Volume
Under-dash Unit	50 W	65 × 185 × 280 mm (approx. 3370 cm ³) (2½" × 7¼" × 11")	3.0 kg (6.6 lb)	4.26 kg (9.4 lb)	0.022 m ³ (0.755 ft ³)
	110 W	65 × 185 × 327 mm (approx. 3932 cm ³) (2½" × 7¼" × 12⅝")	3.5 kg (7.8 lb)	4.94 kg (10.9 lb)	
Trunk-mount Unit	50 W	65 × 185 × 280 mm (approx. 3370 cm ³) (2½" × 7¼" × 11")	3.0 kg (6.6 lb)	6.45 kg (14.2 lb)	0.022 m ³ (0.755 ft ³)
	110 W	65 × 185 × 357 mm (approx. 4293 cm ³) (2½" × 7¼" × 14⅛")	3.5 kg (7.8 lb)	7.26 kg (16.0 lb)	
Control Head		50 × 88 × 80 mm (approx. 350 cm ³) (2" × 3½" × 3⅜")	0.8 kg (1.8 lb)	Included and shipped with Trunk-mount Unit.	
Speaker		121 × 121 × 72 mm (approx. 1054 cm ³) (4¾" × 4¾" × 2⅞")	0.63 kg (1.38 lb)		

Performance Specifications

Transmitter (EIA RS-152B, DOC RSS-119)

Frequency Stability (-30° to +60°C)	5 ppm, standard 2.5 or 2.0 ppm, optional
Modulation: 16F3 (for 100% @ 1000 Hz)	±5 kHz @ 20/25/30 kHz ±2.5 kHz @ 12.5 kHz
Frequency Separation	1.0 MHz, standard 2.0 MHz, optional
Spurious & Harmonics	-80 dB
FM Noise	-50 dB
Audio Response	300-400 Hz: +1, -3 dB 400-2700 Hz: +1, -1.5 dB 2700-3000 Hz: +1, -3 dB
Audio Distortion (@ 60% deviation)	3% or less @ 1000 Hz
Output Impedance	50 ohms

Receiver (EIA RS-204C, DOC RSS-119)

Frequency Stability (-30° to +60°C)	5 ppm, standard 2.5 or 2.0 ppm, optional
Channel Spacing	12.5, 20, 25 or 30 kHz
Acceptable Radio Frequency Displacement	±3.5 kHz @ 20/25/30 kHz ±2.25 kHz @ 12.5 kHz
Frequency Separation	1.0 MHz, standard 2.0 MHz, optional
Sensitivity (12 dB SINAD)	.25 µV
Selectivity (±20 kHz)	-85 dB
Spurious & Image Rejection	-90 dB
Intermodulation	80 dB
Audio Output	5 Watts @ 5% distortion or less @ 3.2 ohms
Input Impedance	50 ohms