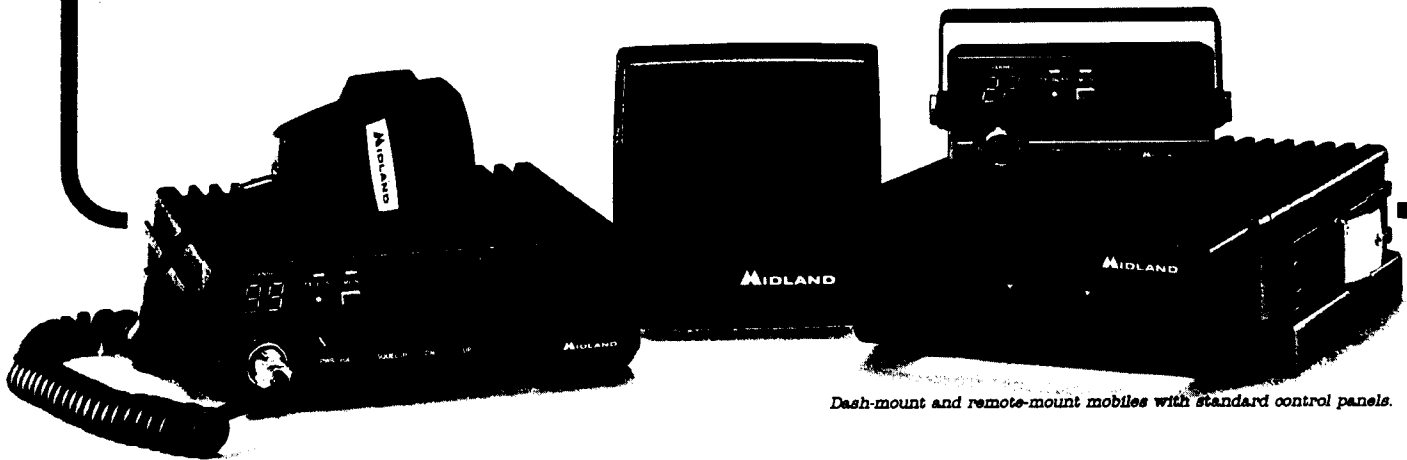


Models 70-1340 & 70-1440

VHF
136-174 MHz
2-40 Watts



Dash-mount and remote-mount mobiles with standard control panels.

Midland® Syn-Tech XTR™ programmable frequency-synthesized 2-Way FM mobile radios

***XTR*ordinary conventional mobile performance and reliability . . . with built-in programmable Syn-Tech™ Trunking capability.**

- Programmable for 22 channels, expandable to 99 with plug-in option.
- Frequency separation: 10 MHz at 40 Watts or 24 MHz at 30 Watts, transmit. 24 MHz, receive.
- User-friendly controls. Detent-rotary or optional rotary-momentary channel selector, with programmable electronic "end stops". Wide choice of control panels to match options and system requirements.
- Optional scan control panels on conventional models for programmable dual-priority, 40-channels-per-second channel scan.
- Tone and digitally coded squelch (CTCSS/DCS) independently programmable by channel, transmit and receive. 41 CTCSS and 83 DCS codes.
- Programmable time-out timer.
- Programmable busy-channel lock-out in conventional operation.
- Data-capable: inexpensive optional interface kits for data communications.
- No field tuning required. Programmable output power and deviation levels. Each channel programmable for either of two predetermined power levels.
- Programming via external jack by PC, pre-loaded data module, E²PROM programmer unit, or cloning.
- Rugged die-cast chassis. Radios meet U.S. military standards for shock and vibration (MIL STD 810C/D/E). Weatherproof options for remote-mount models.
- Voice Storage/Message Relay option operates as a "mobile answering machine" or as a range extender for portables.
- Two voice privacy options: "High Security" rolling code scrambler or "Private Squelch" (CTCSS/DCS plus voice inversion).
- Many signaling options including DTMF signaling with or without automatic number identification (ANI).

Syn-Tech™ Trunking: A simple way to trunk ordinary repeaters that can double channel loading while providing faster system access, more channel privacy, less interference. No special repeater equipment needed; the trunking logic is included in all Syn-Tech XTR models.



These radios have a trunking control panel. They are programmable for trunked operation only, conventional only, or both, and can co-exist with conventional units on the repeaters. They provide codes for 41 trunked groups and are programmable to permit either of two groups to be user-selected. Manual monitor and channel selection are disabled in the trunked mode.

programmable frequency-synthesized
Midland® Syn-Tech XTR™
 two-way FM mobile radios

VHF
 136-174 MHz
 2-40 Watts

General Specifications

RF Power Output (dual power levels)	Frequency Range	Model Number	FCC ID Number (Parts 15, 21 and 90)	Industry Canada Type Approval Number (RSS-119)
Each channel programmable for one of two power levels from 2 to 40 Watts	136-160 MHz	70-1340A Dash Mount 70-1440A Trunk Mount	AK58IF701340A AK58IF701440A	395 193 4651
	150-174 MHz	70-1340B Dash Mount 70-1440B Trunk Mount	AK58IF701340B	
Channel Capacity: 22 channels, expandable to 99 with plug-in option.				
CTCSS/DCS: Each channel independently programmable at random, TX and RX, for any of 41 tone (CTCSS) and 83 digital (DCS) codes.				
Channel Scanning: Conventional models: Dual priority, 40-channel-per-second scan. Programmable for carrier, CTCSS/DCS or open-channel scanning. Requires optional front panel scan controls.				
Primary Power: 13.6 Vdc ± 20% (negative ground)	Approx. Current Drain: ● 13.6 Vdc	Transmit: 8.0A ● full power Receive (● full rated audio): 1.0A Standby (varies with options): 0.3A typical		
Dimensions:	Approx. Size (HWD)	Approx. Volume		Weight
Dash-mount units:	2.25 x 7.75 x 8.87 in (57 x 196 x 225 mm)	155 in³ (2514 cm³)		5.7 lb (2.6 kg)
Remote-mount units:	2.25 x 7.75 x 9.72 in (57 x 196 x 247 mm)	169 in³ (2759 cm³)		6.1 lb (2.8 kg)
Remote control head:	2.25 x 4.75 x 3.31 in (57 x 120 x 84 mm)	35.4 in³ (570 cm³)		0.8 lb (0.4 kg)
Speaker:	4.81 x 4.81 x 2.87 in (121 x 121 x 72 mm)	66.4 in³ (1054 cm³)		1.4 lb (0.6 kg)
Approximate Shipping Weight and Volume: (includes standard microphone, mounting hardware and cables)				
Dash-mount units:	7.4 lb. (3.38 kg)	0.52 ft³ (0.015 m³)		
Remote-mount units:	11.8 lb. (5.35 kg)	0.52 ft³ (0.015 m³)		
Shock: MIL 810D 516.3 Procedure I MIL 810E 516.4 Procedure I	Vibration: MIL 810C 514.2 Procedure VIII-V Category I MIL 810D Method 514.3, I-3.2.10 MIL810E Method 514.4, I-3.4.7			
Optional (Remote-mount only. Requires optional MIL810C/D/E Kits):				
Dust:	MIL810D 510.2 Procedure II MIL810E 510.3 Procedure II			
Rain:	MIL810D 506.2 Procedure I (blowing rain) & Procedure II MIL810E 506.3 Procedure I (blowing rain) & Procedure II			
Salt-fog:	MIL810D 509.2 Procedure I MIL810E 509.3 Procedure I			

Specifications subject to change without notice

Transmitter Specifications

TIA/EIA-603

RF Power Output: (programmable)	2-40W (see Frequency Separation)
Frequency Stability: (-30° to +60°C)	±0.0005% standard (±0.0002% or ±0.00025% optional)
Modulation (direct FM):	16K0F3E: 5 kHz maximum
Frequency Separation: (@ full-rated specifications)	24 MHz @ 30 Watts 10 MHz @ 40 Watts
Spurious & Harmonics:	-70 dB
FM Hum & Noise:	-50 dB
Audio Response:	per TIA/EIA specifications
Audio Distortion: (@ 60% deviation)	3% or less @ 1000 Hz
Output Impedance:	50 ohms

Receiver Specifications

TIA/EIA-603

Frequency Stability: (-30° to +60°C)	±0.0005% standard (±0.0002% or ±0.00025% optional)
Sensitivity (12dB SINAD):	0.30 µV
Selectivity (±30 kHz):	-80 dB
Frequency Separation: (@ full-rated specifications)	24 MHz minimum
Acceptable Radio Frequency Displacement:	±3.5 kHz minimum
Spurious Rejection:	-80 dB
Intermodulation:	-78 dB
Squelch Sensitivity:	0.18 µV maximum
Audio Output (Int.): 3 W @ 3% distortion or less *(Ext.): 10 W @ 3% distortion or less	
Input Impedance:	50 ohms

*With 3.2 Ohm load. Remote-mount models at control head accessory connector with 4-meter maximum control cable. For longer control cables measurement must be made at accessory connector on the rear of the radio.

Syn-Tech XTR Options:

- 99-channel capability.
- Choice of front-panel channel scan controls (with or without operator add/delete).
- Programmable CTCSS/DCS encoder/decoder.
- Programmable "Private Squelch" (CTCSS/DCS + voice-inversion scrambling).
- High-security (rolling code) scrambler.
- Digital voice storage/retrieval and in-band vehicular repeater system.
- Selective signaling:
 - 2-tone sequential decode.
 - Burst-tone encode.
 - DTMF decode.
- DTMF microphones with or without ANI.
- Reverse burst generator.
- Momentary-rotary channel selector.
- High/Low RF power level front-panel control.
- Short or long-term memory backup.
- High-stability TCXOs.
- MIL810D/E salt-fog, rain & dust protection and weatherproof accessories (remote-mount models).
- Front-panel "Auxiliary" switch.
- Ignition-sensing radio power control.
- Remote speakers.

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