

TK-D740V/D840U

DMR

VHF/UHF DIGITAL TRANSCEIVER

FleetSync[®] by KENWOOD

Introducing the new TK-D740V/D840U mobiles, launched together with the new TK-D240V/D340U portables and completing KENWOOD's impressive DMR system line-up. Thanks to compliance with MIL-STD and IP54 environmental standards, they can be relied on through thick and thin. As well as handling both analog and digital communications, these user-friendly DMR radios can even operate in direct mode, without a repeater. They also offer KENWOOD Call Interrupt and also benefit in having KENWOOD enhanced audio quality. These truly resourceful team members will enable you to make the most of your legacy analog equipment while also benefitting from digital communications.

Two-slot TDMA

Belonging to the DMR Tier II category, which covers licensed conventional systems, these radios are specified for 2-slot Time Division Multiple Access (TDMA) operation in 12.5 kHz channels. This means they can offer greater spectrum efficiency.

Two-in-One – Digital & Analog

These DMR radios can operate in both digital and FM analog modes, switching automatically as needed. Interoperability with legacy analog radios allows organizations to migrate to full digital at their own pace.

Dual-slot Direct Mode

Up to two simultaneous direct-mode subscriber calls can be supported in a 12.5 kHz channel, without requiring a repeater, thus doubling channel capacity.

Call Interruption

In an emergency or whenever a user needs to interrupt a call, Call Interrupt is available in both direct and repeater modes, while encoding or decoding. Also featured are emergency functions to help protect staff in remote areas, etc.

Tough All-terrain

These TK-D740V/D840U mobile radios conform to MIL-STD C/D/E/F/G standards for ruggedness, and are IP54 rated for dust & water protection, making them more than capable of withstanding harsh operating conditions.*

*Applies only when using a microphone KMC-35 or KMC-36.

2-Digit LED Channel Display with Brightness Control

The large 2-digit LED display provides a clear indication of which channel is being used, and the brightness level can be adjusted (high/low) to suit the time of day and ambient light conditions. The front panel also features 9 programmable function keys for enhanced operating ease.

Programmable Blue LED

The blue LED indicator can be customized to provide useful status information. For example, it can be used in combination with the orange LED for Selective Call differentiation.

Clear, Powerful Audio

A radio's most important quality is clarity – being able to hear, loud and clear, what the other party is saying, and these mobiles deliver just that. For instance, the AMBE+2™ VOCODER technology accurately replicates natural human speech nuances for superior voice quality, even with high levels of ambient noise. Additionally, Voice Announcement can confirm the channel number, so there is no need to look at the display. English is the default language, but Spanish and French are also available*.

*Availability varies depending on the region.

Other features

- Max. 32 ch in 2 zones (16 ch per zone)
- Wide 70 MHz UHF coverage • External D-sub 15-pin (DE-15) interface • External speaker connector (3.5 mm diameter phone jack)
- Audio output power 4 W @ 4 Ω • GPS connectivity (available later) • Single zone and Normal scanning functions • Horn alert/P.A. function • Ignition sensing • Password protection (read/overwrite)
- Minimum volume setting • Embedded message
- Selective call alert LED • Late entry • Analog signalling: QT/DQT, FleetSync, 2-tone (available later) • Compander per channel • Squelch level

TKR-D710/D810 VHF/UHF DIGITAL REPEATER



KTI-5 INTERFACE BOX



- DMR Tier II Compatible Air Interface • DMR Digital Conventional & FM Analog Conventional modes • 136-174 MHz, 50-5 W; 450-520 MHz, 40-5 W; 400-470 MHz, 40-5 W • 30 Channel Capacity • 6 Backlit Programmable Function Keys
- Two-digit LED Display • Conventional IP Network* • AIS IP Console Interface*

*Requires Interface Box KTI-5 installed with the IP Network Software.

Note: The TKR-D710/D810 is not compatible with duplex/simplex base operation but only for repeater operation.



OPTIONS

KMC-30 MICROPHONE



KMC-32 KEYPAD MICROPHONE



KMC-35 MICROPHONE



KMC-36 KEYPAD MICROPHONE



KMC-9C BASE MICROPHONE



KMC-53 DESK TOP MICROPHONE



KES-3 EXTERNAL SPEAKER



KES-5 EXTERNAL SPEAKER



KCT-18 IGNITION SENSE CABLE



KCT-36 EXTENSION CABLE



KCT-60 CONNECTION CABLE



KLF-2 LINE FILTER



KMB-10 KEY LOCK ADAPTER



All accessories and options may not be available in all markets. Contact an authorized KENWOOD dealer for details and complete list of all accessories and options.

SPECIFICATIONS

		TK-D740V	TK-D840U
GENERAL			
Frequency Range	Type 1 Type 2	136-174 MHz -	450-520 MHz 400-470 MHz
Number of Channels		32 ch/2 zones (Max. 16 ch/zone)	
Channel Spacing	Analog Digital	25*/12.5 kHz 12.5 kHz	
Operating Voltage		13.6 V DC ±15 %	
Operating Temperature Range		-22 °F to +140 °F (-30 °C to +60 °C)	
Frequency Stability		±2.0 ppm	±1.0 ppm
Antenna Impedance		50 Ω	
Dimensions (W x H x D)	Projections not included	6.29 x 1.69 x 4.82 in (160 x 43 x 122.6 mm)	
Weight (net)		2.42 lb (1.10 kg)	
FCC ID	Type 1 Type 2	K44475600 -	K44475701 K44475700

		TK-D740V	TK-D840U
RECEIVER			
Sensitivity	Digital 1 % BER Digital 5 % BER Analog (12 dB SINAD) @ 25*/12.5 kHz	0.45 μV 0.3 μV 0.25 μV	
Adjacent Channel Selectivity	Analog @ 25*/12.5 kHz	75/65 dB	
Intermodulation Distortion	Analog	73 dB	
Spurious Response	Analog	75 dB	
Audio Distortion		Less than 5 %	
Audio Output		4 W/4 Ω	
TRANSMITTER			
RF Power Output	High/Mid	50-5 W/25-5 W	45-5 W/25-5 W
Spurious Response		73 dB	75 dB
FM Hum & Noise	Analog @ 25*/12.5 kHz	45/40 dB	
Audio Distortion		Less than 5 %	
Emission Designator		16K0F3E, 14K0F2D, 14K0F3E, 12K0F2D, 11K0F3E, 7K50F2D, 7K60FXE, 7K60FXD	

*Analog 25 kHz is not included in the models sold in the USA or US territories. Measurements made per CAI measurement procedures (digital) and TIA-603 (analog); specifications are typical. Details and timing of firmware and software updates are subject to change without notice. Specifications are subject change without notice, due to advancements in technology.

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ENVIRONMENTAL SPECIFICATIONS

MIL-STD	Method / Procedures				
	810C	810D	810E	810F	810G
Low Pressure	500.1/I	500.2/I, II	500.3/I, II	500.4/I, II	500.5/I, II
High Temperature	501.1/I, II	501.2/I, II	501.3/I, II	501.4/I, II	501.5/I, II
Low Temperature	502.1/I	502.2/I, II	502.3/I, II	502.4/I, II	502.5/I, II
Temperature Shock	503.1/I	503.2/I	503.3/I	503.4/I, II	503.5/I
Solar Radiation	505.1/I	505.2/I	505.3/I	505.4/I	505.5/I
Rain* ¹	506.1/I, II	506.2/I, II	506.3/I, II	506.4/I, III	506.5/I, III
Humidity	507.1/I, II	507.2/I, II, III	507.3/I, III	507.4	507.5/II
Salt Fog* ¹	509.1/I	509.2/I	509.3/I	509.4	509.5
Dust* ¹	510.1/I	510.2/I	510.3/I	510.4/I, III	510.5/I
Vibration	514.2/VIII, X	514.3/I	514.4/I	514.5/I	514.6/I
Shock	516.2/I, II, V	516.3/I, IV, V	516.4/I, IV, V	516.5/I, IV, V	516.6/I, IV, V
International Protection Standard	IP54* ¹				
Dust & Water Protection	IP54* ¹				

*1: Testing requirements are: (a) Microphone (KMC-35/36) is connected; (b) cap is installed on D-sub 15pin connector; (c) external antenna is connected to antenna receptacle; and (d) neither the KCT cable nor speaker cable is connected.

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