

Introducing the new TK-D740/D840 mobiles, launched together with the new TK-D240/D340 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 analogue 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 analogue 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 & Analogue

These DMR radios can operate in both digital and FM analogue modes, switching automatically as needed. Interoperability with legacy analogue 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-D740/D840 mobile radios conform to MIL-STD C/D/E/F/G standards for ruggedness, and are IP54 rated for water & dust intrusion, 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, French, German, Italian, Dutch and Russian are also available.

5-Tone Signalling

A series of programmed audio tones is used to specify one or more radios and initiate a conversation; all other radios will remain muted. Several signalling formats are available.

Other features

- Max. 128 channels in 4 zones (32 channels per zone)
- Wide 70 MHz UHF coverage
- 25 - 5 W output
- External D-sub 15-pin (DE-15) interface
- External speaker connector (3.5 mm diameter phone jack)
- Audio output power 4 W @ 4 Ohm
- GPS connectivity (future firmware update)
- Single zone and Normal scanning functions
- Horn alert / PA function
- Ignition sensing
- Password protection (read/overwrite)
- Minimum volume setting
- Embedded message
- Selective call alert LED
- Late entry
- Analogue signalling: QT/DQT, FleetSync, 5-tone signalling
- Compander per channel
- Squelch level



OPTIONS							
KMC-30 Microphone		KMC-9C Base microphone		KES-5 External speaker		KCT-60 Connection cable	
KMC-32 Keypad microphone		KMC-53 Desktop microphone		KCT-18 Ignition sense cable		KLF-2 Line filter	
KMC-35 Microphone		KES-3 External speaker		KCT-36 Extension cable		KMB-10 Key lock adapter	
KMC-36 Keypad microphone		All accessories and options may not be available in all markets. Contact an authorized KENWOOD dealer for details and a complete list of all accessories and options.					

SPECIFICATIONS		
GENERAL	TK-D740	TK-D840
Frequency range	136 - 174 MHz	400 - 470 MHz
Number of channels	128 ch / 4 zones (max. 32 ch / zone)	
Channels spacing	Analogue Digital	25 / 20 / 12.5 kHz 12.5 kHz
Operating voltage	13.2 V DC (10.8 - 15.6 V DC)	
Operating Temperature Range	-30°C to +60°C	
Frequency Stability	± 2.0 ppm	± 1.0 ppm
Antenna Impedance	50 Ohm	
Dimensions (W x H x D)	160 x 43 x 122.6 mm - Projections not included -	
Weight	1.1 kg	

Specifications shown are typical.
 Analogue measurements accord with TIA 603, EN 300 086 & 219.
 Digital measurements accord with EN 300 113.
 R&TTE & Safety Standards: EN300 086-2, EN 300 113-2, EN 300 219-2, EN 301 489-5, EN 60065, EN 60950-1, EN 60215, EN 62209 (SAR).
 Details and timing of firmware and software updates are subject to change without notice.
 Specifications are subject to change without notice, due to advancements in technology.
 FleetSync® is a registered trademark of JVCKENWOOD Corporation.
 AMBE+2™ is a trademark of Digital Voice Systems Inc.
 All other trademarks are the property of their respective holders.

SPECIFICATIONS		
RECEIVER	TK-D740	TK-D840
Sensitivity Digital 1 % BER Digital 5 % BER Analogue (20 dB SINAD) @ 25 / 20 / 12.5 kHz	-1 dB µV (0.45 µV) -4.5 dB µV (0.3 µV) -3 dB µV (0.35 µV) / -3 dB µV (0.35 µV) / -1 dB µV (0.45 µV)	
Adjacent channel selectivity Analogue @ 25 / 20 / 12.5 kHz	75 / 73 / 69 dB	
Intermodulation Distortion - Analogue	65 dB	
Superious Response - Analogue	75 dB	
Audio distortion	Less than 5 %	
Audio output	4 W / 4 Ohm	
TRANSMITTER		
RF power output	25 - 5 W	
Spurious Response	< 1 GHz ≤ -36 dBm, 1 GHz - 4 GHz ≤ -30 dBm	
FM hum & noise Analogue @ 25 / 20 / 12.5 kHz	45 / 45 / 40 dB	
Audio distortion	Less than 5 %	
Emission designator	16K0F3E, 14K0F2D, 14K0F3E, 12K0F2D, 8K50F3E, 7K50F2D, 7K60FXD, 7K60FXE	

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/ II, III	507.3/ II, 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, III, V	516.3/ I, IV, V	516.4/ I, IV, V	516.5/ I, IV, V	516.6/ I, IV, V
International Protection Standard					
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.