

# DMR

# TK-D240/D340

# VHF/UHF Digital Transceiver FleetSync®

Ergonomically styled yet tough enough to comply with both MIL-STD and IP54/55 environmental standards, these portables provide the features and performance needed for a wide range of workplaces – from warehouses and stations to shops and hotels. 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 such KENWOOD added value as Call Interrupt and 1-watt audio output. 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

A radio's most important quality is clarity – being able to hear, loud and clear, what the other party is saying. And these portables deliver

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 subscriber calls can be supported in a 12.5 kHz channel, without requiring a base station or repeater, thus doubling channel capacity.

#### Call Interruption

In an emergency or whenever a user needs to interrupt a call, Call Interruption is available in both direct and repeater modes, while encoding or decoding. There is also a Lone Worker function to protect employees working alone.

#### Tough All-Terrain

These portable radios conform to MIL-STD C/D/E/F/G standards for ruggedness, and are IP54/55 rated for dust & water protection, making them more than capable of withstanding harsh operating conditions.

### Longer Battery Life

Battery life is always important for radio users. Both Lithium-ion and Ni-MH rechargeable batteries are available. Regardless of battery type, operating hours are longer in digital mode. being able to hear, loud and clear, what the other party is saying. And these portables deliver just that. For a start, there is 1 W of audio output power, while the AMBE+2<sup>TM</sup> 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.

### Slim Styling

Compact form with ergonomically stylish design make these radios easy to grip and operate.

#### Other Features

• Max. 32 ch in 2 zones (16 ch per zone) • Wide 70 MHz UHF coverage • Selectable 8- or 16-channel using channel stopper • 5/1 W (VHF), 4/1 W (UHF) output • Audio output power 1 W @ 12  $\Omega$  • Scanning functions • Password protection (read/overwrite) • Minimum volume setting • Embedded message • Selective call alert LED • Key lock • Late entry • Analog signalling: QT/DQT, FleetSync, 2-tone (available later) • Compander per channel • Squelch level



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**



## **Main Specifications**

Contact an authorized Kenwood dealer for details and complete list of all accessories and options.

		TK-D240K	TK-D340K	
GENERAL				
Frequency Range	Type 1	136-174 MHz	450-520 MHz	
	Type 2	-	400-470 MHz	
Number of Channels		32		
Zones			2	
Max. Channels per Zone		16		
Channel Spacing	Analog	25 kHz / 12.5 kHz		
	Digital	12.5	i kHz	
Operating Voltage		7.5V DC ± 20%		
Battery Life		Approx. 11.5/13.5 hrs w/KNB-45L		
(5-5-90 battery saver of	off)	Approx. 14/17 hrs w/KNB-69L		
Operating Temperature R	ange*	-22° F ~ +140° F (-30° C ~ +60° C)		
with KNB-45L/69L		14 °F to +140 °F (-10 °C to +60 °C)		
Frequency Stability		± 2.0 ppm	± 1.0 ppm	
Antenna Impedance		50 Ω		
Dimensions (W x H x D)	with KNB-45L	2.13 x 4.78 x 1.33 in (54 x 121.4 x 33.8 mm)		
Projections Not Included	with KNB-69L	2.13 x 4.78 x 1.49 in (54 x 121.4 x 37.8 mm)		
Weight (net)	with KNB-45L	10.0 oz (285 g)		
	with KNB-69L	10.9 oz	: (310 g)	
FCC ID	Type 1	K44475400	K44475501	
	Type 2	-	K44475500	

	TK-D240K TK-D340K		
RECEIVER			
Sensitivity Digital (1% BER)	0.45 μV		
Digital (5% BER)	0.3 μV		
Analog (12 dB SINAD)	0.25 μV		
Selectivity Analog @ 25 / 12.5 kHz	74 / 68 dB		
Intermodulation Distortion Analog	72 dB		
Spurious Response Analog	70 dB		
Audio Distortion	Less than 10%		
Audio Output	1 W / 12 Ω (Internal Output)		
	500mW / 8 Ω (External Output)		
TRANSMITTER			
RF Power Output High / Low	5/1 W 4/1 W		
Spurious Response	70 dB		
FM Hum & Noise Analog @ 25 / 12.5 kHz	45 / 40 dB		
Audio Distortion	Less than 2%		
Emission Designator	16K0F3E, 14K0F2D, 14K0F3E, 12K0F2D		
	11K0F3E, 7K50F2D, 7K60FXE, 7K60FXD		

Analog measurements made per TIA 603 and specifications shown are typical.
Analog 25 kHz is not included in the models sold in the USA or US territories.
Due to advancements in technology, specifications are subject to change without notice.
Details and timing of firmware and software updates are subject to change without notice.

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.

## **Applicable MIL-STD & IP**

MIL Standard	MIL 810C Methods/Procedures	MIL 810D Methods/Procedures	MIL 810E Methods/Procedures	MIL 810F Methods/Procedures	MIL 810G Methods/Procedures
Low Pressure	500.1/Procedure I	500.2/Procedure I, II	500.3/Procedure I, II	500.4/Procedure I, II	500.5/Procedure I, II
High Temperature	501.1/Procedure I, II	501.2/Procedure I, II	501.3/Procedure I, II	501.4/Procedure I, II	501.5/Procedure I, II
Low Temperature	502.1/Procedure I	502.2/Procedure I, II	502.3/Procedure I, II	502.4/Procedure I, II	502.5/Procedure I, II
Temperature Shock	503.1/Procedure I	503.2/Procedure I	503.3/Procedure I	503.4/Procedure I, II	503.5/Procedure I
Solar Radiation	505.1/Procedure I	505.2/Procedure I	505.3/Procedure I	505.4/Procedure I	505.5/Procedure I
Rain	506.1/Procedure I, II	506.2/Procedure I, II	506.3/Procedure I, II	506.4/Procedure I, III	506.5/Procedure I, III
Humidity	507.1/Procedure I, II	507.2/Procedure II, III	507.3/Procedure II, III	507.4	507.5/Procedure II
Salt Fog	509.1/Procedure I	509.2/Procedure I	509.3/Procedure I	509.4	509.5
Dust	510.1/Procedure I	510.2/Procedure I	510.3/Procedure I	510.4/Procedure I, III	510.5/Procedure I
Vibration	514.2/Procedure VIII, X	514.3/Procedure I	514.4/Procedure I	514.5/Procedure I	514.6/Procedure I
Shock	516.2/Procedure I, II, V	516.3/Procedure I, IV	516.4/Procedure I, IV	516.5/Procedure I, IV	516.6/Procedure I, IV
International Protection Standard					
Dust & Water Protection	IP54/55*			•	

\*1: The 2-pin connector cover has to be connected to the radio, or the locking bracket has to be attached to the KMC-45D external speaker microphone.

# **KENWOOD**

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