

# TK-D240V/D340U

## DMR

## VHF/UHF DIGITAL TRANSCEIVER

**FleetSync**<sup>®</sup>  
by KENWOOD

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 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.

### ● 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 portables deliver just that. For a start, there is 1 W of audio output power, while 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.

### ● 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 Ω • 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

#### 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

**■ KNB-45L**  
Li-ion BATTERY PACK  
(7.4 V/2000 mAh)



**■ KNB-53N**  
Ni-MH BATTERY PACK  
(7.2 V/1400 mAh)



**■ KNB-69L**  
Li-ion BATTERY PACK  
(7.4 V/2550 mAh)



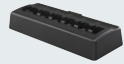
**■ KSC-35S**  
RAPID CHARGER (for  
Li-ion KNB-45L/69L)



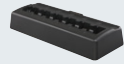
**■ KSC-43**  
RAPID CHARGER (for  
Li-ion KNB-45L/69L &  
Ni-MH KNB-53N)



**■ KSC-316**  
6-POCKET MULTIPLE CHARGER  
(6-pocket for Li-ion KNB-45L/69L  
& Ni-MH KNB-53N)



**■ KSC-356**  
6-POCKET MULTIPLE CHARGER  
(6-pocket for Li-ion KNB-45L/69L)



**■ KMB-35**  
MULTI CHARGER ADAPTER  
(6-unit for KSC-355CR)



**■ KSC-355CR**  
CHARGER POCKET  
(for KMB-35)



**■ KRA-22**  
VHF HELICAL ANTENNA  
(Low Profile)



**■ KRA-23**  
UHF HELICAL ANTENNA  
(Low Profile)



**■ KRA-26**  
VHF HELICAL ANTENNA  
(Standard Length)



**■ KRA-27**  
UHF WHIP ANTENNA  
(Standard Length)



**■ KRA-41**  
VHF STUBBY  
ANTENNA



**■ KRA-42**  
UHF STUBBY  
ANTENNA



**■ KMC-21**  
SPEAKER  
MICROPHONE  
(Compact Size)



**■ KMC-45D**  
SPEAKER  
MICROPHONE



**■ KEP-2**  
2.5 mm EARPHONE  
KIT (for KMC-45D)



**■ KHS-8BL/BE**  
2-WIRE PALM MIC  
W/ EARPHONE



**■ KHS-8NC**  
2-WIRE PALM MIC W/  
EARPHONE, NC



**■ KHS-22**  
BEHIND-THE-HEAD  
HEADSET W/PIT



**■ KBH-10**  
BELT CLIP



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-D240V	TK-D340U	
<b>GENERAL</b>			
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	7.5 V DC ± 20 %		
Battery Life (5-5-90, battery saver off)	Analog/Digital	approx. 11.5/13.5 hrs w/KNB-45L approx. 14/17 hrs w/KNB-69L approx. 8/10 hrs w/KNB-53N	
Operating Temperature Range	-22 °F to +140 °F (-30 °C to +60 °C) 14 °F to +140 °F (-10 °C to +60 °C) with KNB-45L/69L		
Frequency Stability	±2.0 ppm		
Antenna Impedance	50 Ω		
Dimensions (W x H x D)	w/KNB-45L w/KNB-69L w/KNB-53N	2.13 x 4.78 x 1.33 in (54 x 121.4 x 33.8 mm) 2.13 x 4.78 x 1.49 in (54 x 121.4 x 37.8 mm) 2.13 x 4.78 x 1.33 in (54 x 121.4 x 33.8 mm)	
Weight	w/KNB-45L w/KNB-69L w/KNB-53N	10.0 oz (285 g) 10.9 oz (310 g) 12.7 oz (360 g)	
FCC ID	Type 1 Type 2	K44475400 -	K44475501 K44475500

	TK-D240V	TK-D340U
<b>RECEIVER</b>		
Sensitivity	Digital 1 % BER Digital 5 % BER Analog (12 dB SINAD)	0.45 µV 0.3 µV 0.25 µV
Adjacent Channel Selectivity	Analog @ 25*/12.5 kHz	74/68 dB
Intermodulation Distortion	Analog	72dB
Spurious Response	Analog	70 dB
Audio Distortion	Less than 10 %	
Audio Output	1 W/12 Ω (Internal speaker) 500 mW/8 Ω (External speaker)	
<b>TRANSMITTER</b>		
RF Power Output	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 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.  
FleetSync is a registered trademark of JVC KENWOOD Corporation.  
AMBE+2 is a trademark of Digital Voice Systems Inc.  
All other trademarks are the property of their respective holders.

## 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, V	516.3/I, IV	516.4/I, IV	516.5/I, IV	516.6/I, IV
<b>International Protection Standard</b>					
Dust & Water Protection	IP54/55*1				

\*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.

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