

# TK-D240/D340

**VHF/UHF DIGITAL TRANSCEIVER** 







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

#### 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 water & dust intrusion, 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.

#### 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  $\circ$  5/1 W (VHF), 4/1 W (UHF) output  $\circ$  Audio output power 1 W @ 12  $\Omega$   $\circ$  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

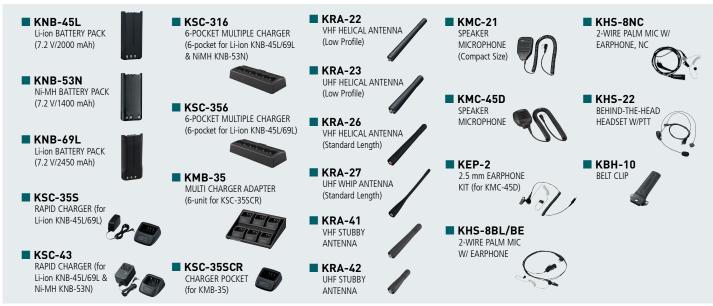




- DMR Tier II Compatible Air Interface DMR Digital Conventional & FM Analog Conventional modes
- 136-174 MHz. 50-5 W: 450-520 MHz. 40-5 W: 400-470 MHz, 40-5 W • 30 Channel Capacity • 6 Backlit Programmable Function Keys • Two-digit LED Display
- Conventional IP Network\* AIS IP Console Interface\* \*Requires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





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-D240	TK-D340		
GENERAL					
Frequency Range	requency Range		400-470 MHz 450-520 MHz		
Number of Channels	Number of Channels		32 ch / 2 zones (Max. 16 ch/ zone)		
Channel Spacing	Analog	25/12	.5 kHz		
	Digital	12.5 kHz			
Operating Voltage		7.5 V DC ± 20 %			
Battery Life (5-5-90, battery saver off)		approx. 11.5/13.5 hrs w/KNB-45L			
	Analog/Digital	approx. 14/17 hrs w/KNB-69L			
		approx. 8/10 hrs w/KNB-53N			
Operating Temperatu	ating Temperature Range		-30°C to +60°C		
		(with KNB-45L/69L: -10°C to +60°C)			
Frequency Stability	requency Stability		±1.0 ppm		
Antenna Impedance	na Impedance 50 Ω		Ω		
Dimensions	w/KNB-45L	54 x 121.4	x 33.8 mm		
(W x H x D)	w/KNB-69L	54 x 121.4	54 x 121.4 x 37.8 mm		
	w/KNB-53N	54 x 121.4	x 33.8 mm		
Weight	w/KNB-45L	28	5 g		
	w/KNB-69L	31	0 g		
	w/KNB-53N	36	0 g		

		TK-D240	TK-D340	
RECEIVER				
Sensitivity	Digital 1 % BER	0.45 μV 0.3 μV		
	Digital 5 % BER			
	Analog (12 dB SINAD)	0.25	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)		
TRANSMITTER				
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		

Specifications shown are typical.

Analog measurements accord with TIA 603, EN 300 086 & 219, Digital measurements accord with EN 300 113,

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	500.1/1	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	502.1/1	502.2/ I, II	502.3/ I, II	502.4/ I, II	502.5/ I, II		
Temperature Shock	503.1/1	503.2/1	503.3/1	503.4/ I, II	503.5/1		
Solar Radiation	505.1/1	505.2/1	505.3/1	505.4/1	505.5/1		
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	509.1/1	509.2/1	509.3/ I	509.4	509.5		
Oust*1	510.1/1	510.2/ I	510.3/ I	510.4/ I, III	510.5/ I		
/ibration	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		
nternational Protection Standard							
Dust & Water Protection		·	IP54/55*1	•			

<sup>\*1:</sup> 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.

# **JVCKENWOOD Corporation**

**Professional Systems Segment** Communications Equipment Business Unit

