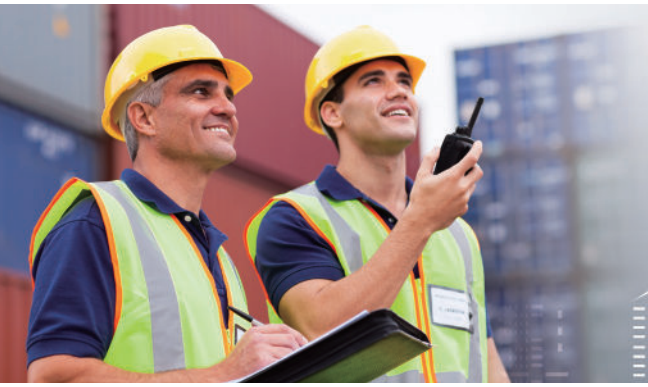
KENWOOD



TKR-D710/D810

VHF/UHF Digital Repeater - Tier II

DMR

GENERAL FEATURES

- 136 - 174 MHz, 5 - 50 W
- 400 - 470 MHz, 5 - 40 W
- Repeater Operation
- Two-Digit LED Display
- 6 Lighted Programmable Function Keys
- Programmable AUX I/O's
- RF Power Down Detect
- DTMF Front Panel PF Key Control (Analogue Only)
- DTMF AUX Output Control (Analogue Only)
- DTMF AUX Input Monitoring (Analogue Only)
- Windows® PC Programming
- Flash Firmware Upgrading

DIGITAL – CONVENTIONAL MODE

- DMR Digital Air Interface
- 12.5 kHz Channels
- Mixed FM / Digital Operation
- Repeater Control Built-in
- Colour Code Repeater Control
- Conventional IP Network *1
- AMBE+2™ VOCODER
- AIS IP console interface *1 *2
- Call interruption

FM MODES – GENERAL

- VHF: 25 & 12.5 kHz Channels
- UHF: 25 & 12.5 kHz Channels

FM CONVENTIONAL MODE

- 16 QT / DQT Repeater Control Built-in
- Hang Timer

*1: Requires interface Box KTI-5 installed with the IP network sortware

*2: AIS stands for Application interface Standard, which is a voice/data communication protocol set by the DMR Association.

KTI-5
Interface box

Main Specifications

		TKR-D710E	TKR-D810E
GENERAL			
Frequency Range		136 - 174 MHz	400 - 470 MHz
Channel Spacing	**Analogue**	12.5 / 25 kHz	
	Digital	12.5 kHz	
PLL Channel Step		2.5 / 3.125 kHz	3.125 / 5 kHz
Current Drain	**Standby**	0.5 A	
	Receive	1.0 A	
	Transmit	11.0 A	
TX Power	**50% Duty**	50W	40W
	100% Duty	25W	25W
Frequency Stability		± 1.0 ppm	
Operating Voltage		13.2 V DC (10.8 - 15.6 V DC)	
Operating Temperature Range		-30° C to +60° C	
Antenna Impedance		50 Ω	
Dimensions (W x H x D) , Projections not included		483 x 88 x 340 mm	
Weight (net)		9.7 kg	
RECEIVER			
Sensitivity (Digital) (12.5kHz)	**5% BER**	0.25 µV	
	1% BER	-3 dBµV (0.35 µV)	
Sensitivity (Analogue)	**12dB SINAD**	0.28 µV	
	20dB SINAD	-3 dBµV (0.35 µV)	
Adjacent Channel Selectivity (Analogue) (25 kHz / 12.5kHz)		83 dB / 77 dB	80 dB / 74 dB
FM Hum & Noise (Analogue)	**25 kHz / 12.5 kHz**	55 dB / 50 dB	
Intermodulation		72 dB	
Spurious Response Rejection		85 dB	
Audio Distortion (Ext. Speaker)		Less than 2.5% at 1000 Hz	
Audio Output (Ext. Speaker)		4 W (at 4 Ω, less than 5% distortion)	
TRANSMITTER			
RF Power Output		5 W to 50 W	5 W to 40 W
Modulation Limiting (Analogue)	**25 kHz / 12.5 kHz**	±5.0 kHz / ±2.5 kHz	
Spurious Emission		- 36 dBm ≤ 1 GHz, -30 dBm > 1 GHz	
FM Noise (EIA) (Analogue)	**25 kHz / 12.5 kHz**	55 dB / 50 dB	
Modulation Distortion		Less than 1% at 1000 Hz	
Modulation		16K0F3E, 8K50F3E, 14K0F2D, 7K50F2D, 7K60FXD, 7K60FXE	

Analogue measurements made per EN 300 086 and 113.
Digital measurements made per EN 300 113 and EN301 166.
Specifications shown are typical.
Kenwood follows a policy of continuous advancement in development.
For this reason specifications may be changed without notice.

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