## KENWOOD

# TKR-D710/D810

### **VHF/UHF DIGITAL REPEATER**

#### **GENERAL FEATURES**

- 136 174 MHz, 50 5 W
- 450 520 MHz, 40 5 W
- 400 470 MHz, 40 5 W
- Repeater Operation
- Two-Digit LED Display
- 6 Illuminated Programmable Function Keys
- Programmable AUX I/O's
- RF Power Down Detect
- DTMF Front Panel PF Key Control (Analog Only)
- DTMF AUX Output Control (Analog Only)
- DTMF AUX Input Monitoring (Analog Only)
- Windows<sup>®</sup> PC Programming
- Flash Firmware Upgrading

#### DIGITAL – CONVENTIONAL MODE

- DMR Digital Air Interface
- 12.5 kHz Channels
- Mixed FM / Digital Operation
- Repeater Control Built-in
- 1 Color Code Repeater Control Built-in
- Conventional IP Network<sup>\*1</sup>
- AIS IP console interface\*1, \*2
- AMBE+2<sup>™</sup> VOCODER
- Call Interruption

#### FM MODES – GENERAL

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

#### FM CONVENTIONAL MODE

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

\*1: Requires Interface Box KTI-5 installed with the IP Network Software.

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





#### SPECIFICATIONS

		TKR-D710	TKR-D810
GENERAL			
Frequency Range	Type 1	136-174 MHz	450-520 MHz
	Type 2	-	400-470 MHz
Channel Spacing	Analog	25*/12.5 kHz	
	Digital	12.5 kHz	
Current Drain	Standby	0.5 A	
	Receive	1.0 A	
	Transmit	11.0 A	
TX Power	50 % Duty	50 W	40 W
	100 % Duty	25 W	25 W
Frequency Stability		± 1.0 ppm	
Operating Voltage		13.6 V DC ± 15 %	
Operating Temperature Range		-22° F to +140° F (-30° C to +60° C)	
Antenna Impedance		50 Ω	
Dimensions	Projections not	19 x 3-1/2 x 13-1/3 in	
(W x H x D)	included	(483 x 88 x 340 mm)	
Weight (net)		21.4 lbs (9.7 kg)	
FCC ID	Туре 1	K44422300	K44452500
	Type 2	-	K44452501
IC Certification	Туре 1	282F-422300	-
	Type 2	-	282F-452501

\*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. Kenwood follows a policy of continuous advancement in development.

For this reason specifications may be changed without notice.

 $\mathsf{AMBE+2^{\tiny TM}}$  is a trademark of Digital Voice Systems Inc.

Windows® is a registered trademarks of Microsoft Corporation.

		TKR-D710	TKR-D810	
RECEIVER		TRADITIO	IKI-D010	
Sensitivity (Digital) 3% BER		0.28 µV		
(12.5kHz)	1% BER	-4 dB μV (0.32 μV)		
Sensitivity (Analog)	12 dB SINAD	0.28 μV		
Adjacent Channel Selectivity (Analog)*1 (25 kHz / 12.5 kHz)		83 dB / 77 dB	80 dB / 74 dB	
FM Hum & Noise (Analog)	25 kHz / 12.5 kHz	55 dB / 50 dB		
Intermodulation		80 dB		
Spurious Response Rejection		90 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		50-5 W	40-5 W	
Modulation Limiting (Analog)	25 kHz / 12.5 kHz	± 5.0 kHz / ± 2.5 kHz		
Spurious Emission		80	80 dB	
FM Noise (EIA) (Analog)	25 kHz / 12.5 kHz	55 dB / 50 dB		
Modulation Distortion		Less than 1 % at 1000 Hz		
Modulation		16K0F3E, 11K0F3E, 7K60FXD, 7K60FXE		

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