

VHF/UHF Digital and Analog

TKR-D710/D810



Digital – Conventional Mode

- DMR Tier 2 Conventional
- DMR Conventional IP Network
- *Requires KTI-5 Network Interface Unit
- DMR Auto Slot Select (DASS) ready
- 12.5kHz channel
- 1 Color code Repeater Control Built-in
- Over-the-Air Alias
- Over-the-Air Programming (Repeat only)
- Digital / Analog Mixed Mode

Site Roaming
Group / Individual Call
Status, Short Data, Paging Call
Remote Stun, Kill, Monitor, Check,
& Control
Call Interrupt
ARC4 Enhanced Encryption
(Repeat only)
AES/DES Encryption (Repeat only)
1,000 GIDs Per Site
1,000 UIDs Per Site
FM – Conventional Mode

FM – Conventional Mode

VHF: 25 & 12.5 kHz Channels
UHF: 25 & 12.5 kHz Channels
16 QT / DQT Repeater Control Built-in
Hang Timer / Time Out Timer / CW ID

Features

50 / 40W @ 50% Duty
25 / 25W @ 100% Duty
DMR & Analog Mode
AMBE+2™ VOCODER
Repeater Operation
Two-Digit LED Display

6 Illuminated Programmable Function Keys
 Programmable AUX I/O's
 (Base Operations and some of external devices are not available.)
 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® PC Programming
 Flash Firmware Upgrading
 DMR AIS IP Console Interface
 *Requires KTI-5 Network Interface Unit

Specifications

General	TKR-D710	TKR-D810
Frequency Range		
Type 1	136-174 MHz	450-520 MHz
Type 2		400-470 MHz

Channel Spacing		
Analog	12.5 / 25* kHz	
Digital	12.5 kHz	
Current Drain		
Standby	0.5A	
Receive	1.0A	
Transmit	11.0A	
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	(W x H x D) Projections Not Included	
	19 x 3-1/2 x 13-1/3 inch (483 x 88 x 340 mm)	
Weight (net)	21.4 lbs (9.7 kg)	
FCC ID		
Type 1	K44422300	K44422300
Type 2		K44452501

IC Certification		
Type 1	282F-422300	
Type 2		282F-452501

* 25 kHz is not included in the models sold in the USA or US territories.

Analog measurements made per TIA603. Specifications are measured according to applicable standards. Specifications are subject change without notice, due to advancements in technology.

Receiver	TKR-D710	TKR-D810
Sensitivity		
Digital @ 12.5 kHz (3% BER)	0.28 μ V	
Digital @ 12.5 kHz (3% BER)	-4 dB μ V (0.32 μ V)	
Analog (12 dB SINAD)	0.28 μ V	

Selectivity		
Analog @ 25* kHz	83 dB	80 dB
Analog @ 12.5 kHz	77 dB	74 dB
FM Hum & Noise		
Analog @ 25* kHz	55 dB	
Analog @ 12.5 kHz	50 dB	
Intermodulation Distortion	80 dB	
Spurious Rejection	90 dB	
Audio Distortion (Ext. SP)	Less than 2.5% at 1000 Hz	
Audio Output Power (Ext. SP)	4 W (at 4 Ω , less than 5% distortion)	

Transmitter	TKR-D710	TKR-D810
RF Power Output	50 W to 5 W	40 W to 5 W
Modulation Limiting		
Analog @ 25* kHz	± 5.0 kHz	
Analog @ 12.5 kHz	± 2.5 kHz	
Spurious Emission	80 dB	
FM Hum & Noise		
Analog @ 25 kHz	55 dB	
Analog @ 12.5 kHz	50 dB	
Audio Distortion	Less than 1% at 1000 Hz	

Emission Designator	16K0F3E, 11K0F3E, 7K60FXD, 7K60FXE
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