



High-performance features - such as 16 full-duplex channels, flash memory, and PC/manual tuning - providing crystal-clear and reliable communications to make Kenwood's TKR - 750/850 VHF/UHF FM repeaters the first choice of the demanding application.



HIGH STABILITY 100% CONTINUOUS DUTY

The TKR-750 has a high power output of 50W (at 50% duty) while the TKR-850 offers 40W (at 50% duty)

16 FULL-DUPLEX CHANNELS & SINGLE PRIORITY SCAN

With 16 full-duplex channels, these versatile repeaters can function as a base station or repeater backup unit to suit various applications.

QT/DQT WITH DSO MULTI-DECODE

For QT/DQT groups sharing the same RF signal range, DSP processing allows up to 16 QT/DQT signal variations to be processed simultaneously via the multi-decode function.

COMPANDED AUDIO.

A built-in compander contributes to improved audio when operating as simplex base station.

FLASH MEMORY

Flash memory permits update, advanced features sets and systems architecture changes to be made electronically without ever opening the unit.

2-DIGIT NUMERIC LED DISPLAY

The 2-digit numeric LED on the front panel displays channel number and operator status information, such as an "unlocked" error.

LED INDICATOR

The LED indicator lights provide clear systems status information at a glance, including transmit, receive, battery backup, and DC power.

WIDE/NARROW CHANNEL BANDWIDTH PER CHANNEL

The TKR-750/850 can handle both existing wide-band systems and emerging narrow band applications for extra flexibility and long-term viability.

WINDOWS® PROGRAMMING AND TUNING SOFTWARE

The repeater can be programmed from Windows® compatibility PC quickly and efficiently - without ever opening the case - using FPU and programming interface cable.

6PF KEYS & LOCAL SPEAKER

In addition to 6 programmable function keys (each equipped with LED indicator), the front panel has a built-in speaker. There is also a microphone terminal to allow audio transmission.

EMBEDDED MESSAGE WITH PASSWORD LOCK

The repeater's flash memory can store an electronic message -with password protection - containing owner identification, property ID numbers, user and department names, service records, etc.

EXTERNAL CONTROL I/O

The D-SUB25 connector on the rear panel provides a control I/O interface for external controllers to enable customization and integration with other features and capabilities.

BATTERY BACKUP SYSTEM

Several power-saving features, including a display-off function, help to reduce energy consumption.

DURABLE DIE-CAST CHASSIS CONSTRUCTION

The die-cast aluminium chassis with integrated heat sink is the key to TKR-750/850's durability, service level and reduced weight. The entire unit is sealed to provide long term protection even in the most demanding operating conditions.

Options



KMC-30
Microphone



KMC-9C
Desktop Microphone

Specification

General	TKR-750	TKR-850
Frequency range: TYPE1	146 ~ 174MHz	440 ~ 470MHz
Number of Channels	16	
Channel spacing Wide Narrow (PLL channel stepping)	25 kHz 12.5 kHz (5, 6.25 kHz)	25 kHz 12.5 kHz (5, 6.25 kHz)
Operating Voltage	13.2 V DC	
Current Drain Standby Standby (w/power save) Receive Transmit/Receive	0.8 A 0.3 A Operating mode; DC-IN Backup, FAN : Temp, SAVE:on, DISP:off 1.2 A Less than 13 A	
Duty Cycle	Receive: 100% Transmit : 100%	
Frequency Stability	± 0.0002% (-30°C ~ +60°C)	± 0.00015% (-30°C ~ +60°C)
Operating Temperature Range	-30°C ~ +60°C	
Dimensions (WxHxD)	483 x 88 x 340 mm	
Weight (net)	9.7 Kg	
Applicable Standard	ETS-300-086, 219	ETS-300-086, 219
Receiver (Measures made Per ETS-300-086)		
Antenna Impedance	50Ω	
Sensitivity	0.45 μV	
Adjacent Channel Selectivity 25 kHz 12.5 kHz	85 dB 77 dB	85 dB 75 dB
Intermodulation	72 dB	
Spurious & Image Rejection	90 dB	
Audio Output (Ext. Speakers)	4 W (at 4 Ω, less than 5% distortion)	
Audio Distortion (Ext. Speakers)	Less than 2.5% at 1000Hz	
Band spread TYPE:1	3 kHz	5 kHz
Transmitter (Measures made Per ETS-300-086)		
RF Power Output	50 W adjustable to 25 watts (100% duty at 25W)	40 W adjustable to 25 watts (100% duty at 25W)
Antenna Impedance	50Ω	
Modulation Limiting	± 5kHz at ± 25kHz ± 2.5kHz at ± 12.5kHz	
Spurious Emissions	-36 dBm ≤ 1GHz -30 dBm ≥ 1GHz	
FM Noise (EIA) 25 kHz 12.5 kHz	50 dB 45 dB	
Microphone Impedance	600Ω	
Modulation Distortion	Less than 3% at 1000 Hz	
Band Spread TYPE:1	28 kHz	30 kHz

Receiver	TKR-750	TKR-850
REPEATER CONTROL (Measurements made per TIA/EIA-603)		
Signal (simultaneous) Maximum Number of Tones	16	
Qt Decoder/Encoder Tone Frequency Decoder response time Squelch tail elimination time Encoder frequency error Sensitivity	67.0 ~ 210.7Hz (0.1Hz step) 250ms or Less 140 to 200 ms ± 0.3% or Less SINAD 8dB or Less	
DQT Decoder/Encoder DQT code Decoder response Turn-off transmission time Sensitivity	23 bits total: 3-digit octal number (0 ~ 7, 12bits) with error correction (11bits) 250 ms or Less 140 to 200 ms SINAD 8dB or Less	
Time-out Timer	Off to 30 min	
Repeat Hold Time	Off to 10 sec	
EXTERNAL CONTROL		
CWID Maximum modulation CW tone frequency Morse code speed Maximum character memory	Maximum deviation of 40% ± 10% 400Hz to 2000Hz (default 800Hz) 5 to 30 words per minutes, 9 (default 20WPM) Up to 32 characters (include Space)	
CW Message Maximum Character Number of Banks	Up to 32 characters per bank (include space) 8 Banks	
Test Tone Maximum modulation Test Tone Frequency	Maximum deviation of 60% 300Hz To 3000Hz (default 1000Hz)	

Kenwood follow a policy of continuous advancement in development. For this reason specifications may be changed without notice

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