

KENWOOD

Listen to the Future



Trunking Systems

Kenwood Trunking Systems are designed for commercial and public safety applications where continuous duty operations are required. Kenwood Trunking systems use the TKR 750/850 series as well as the TKR-740/840 repeaters with 100% duty cycle RF amplifiers.

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, etc.

HIGH EFFICIENCY POWER SUPPLY

Kenwood Trunking systems use high efficiency switching power supplies to minimize heat buildup.

2-DIGIT NUMERIC LED DISPLAY

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

FLASH MEMORY

Flash memory permits updates, advanced feature sets, and system architectural changes to be made electronically. This means faster modifications for system operators and less downtime for users.



MULTI-FORMAT COMPATIBILITY

Kenwood Trunking systems are compatible with LTR®, LTR-Net®, Passport®, MPT-1327 formats using external controllers.

WINDOWS® PROGRAMMING AND TUNING SOFTWARE

The repeater can be programmed from a Windows® compatible PC quickly and efficiently – using the optional FPU and programming interface cable.

- **Fully Assembled**
- **100% Continuous Duty**
- **Staged, Tuned and Optimized**
- **Combining Equipment**
- **Rack Mount**
- **Locking Cabinets**

Specifications

Model	TKR-7400S	TKR-7500S	TKR-8400S	TKR-8500S
GENERAL				
Low Band Base Stations				
Frequency Range:				
K1	146 - 162 MHz	146 - 174 MHz	450 - 480 MHz	450 - 480 MHz
K2	158 - 174 MHz	136 - 150 MHz	480 - 512 MHz	480 - 512 MHz
K3	136 - 150 MHz	n/a	400 - 430 MHz	n/a
Number of Channels			1	
Channel Spacing:				
Wideband	30, 25 kHz	30, 25 kHz	25 kHz	25 kHz
Narrowband	15, 12.5 kHz	15, 12.5 kHz	12.5 kHz	12.5 kHz
PLL Channel Step	2.5, 5, 6.25 kHz	2.5, 5, 6.25, 7.5 kHz	5, 6.25 kHz	5, 6.25 kHz
Operating Voltage			115 / 230 VAC, 47-63 Hz	
Backup DC Voltage			13.4 VDC	
DC current requirement, standby			< 2.5 A*	
DC current requirement, transmit	<20 A at 110W	<25 A at 110W	<20 A at 100W	<25 A at 100W
Operating Temperature		-22 to +140F / -30 to +60C		
Frequency Stability	+/- 0.00015%	+/- 0.0002%	+/- 0.00015%	+/- 0.00015%
Antenna Impedance		50Ω		
FCC ID:				
K1	ALH30633110	ALH31103110	ALH30643110	ALH31113110
K2	ALH30633120	ALH31103120	ALH30643120	ALH31113120
K3	ALH30633130	n/a	ALH30643120	n/a
FCC Compliance:				
K1	FCC parts 22, 74, 90	FCC parts 22, 74, 90	FCC parts 22, 74, 90, 95	FCC parts 22, 74, 90, 95
K2	FCC parts 22, 74, 90	FCC parts 90, 90.210	FCC part 90	FCC parts 90, 90.210
K3	FCC parts 22, 74, 90	n/a	FCC part 90	n/a
IC Certification:				
K1	282195598A	282195726A	282195600A	282195725A
K2	282195598A	282195742A	n/a	n/a
K3	282195598A	n/a	282195600A	n/a
RECEIVER				
TKR-7400S				
TKR-7500S				
TKR-8400S				
TKR-8500S				
Sensitivity:				
12 dB SINAD	0.30 μV	0.35 μV	0.30 μV	0.35 μV
20 dB Quieting	0.40 μV	0.45 μV	0.40 μV	0.45 μV
Selectivity				
Wideband (+/- 30 kHz)	95 dB	85 dB	n/a	n/a
Wideband (+/- 25 kHz)	n/a	n/a	90 dB	83 dB
Narrowband (+/- 15 kHz)	89 dB	80 dB	n/a	n/a
Narrowband (+/- 12.5 kHz)	87 dB	77 dB	80 dB	75 dB
Intermodulation Distortion				
Wideband (+/- 30, 60 kHz)	90 dB	80 dB	n/a	n/a
Wideband (+/- 25, 50 kHz)	n/a	n/a	85 dB	78 dB
Narrowband (+/- 15, 30 kHz)	85 dB	75 dB	n/a	n/a
Narrowband (+/- 12.5, 25 kHz)	n/a	n/a	80 dB	75 dB
Spurious & Image Rejection	100 dB	90 dB	100 dB	90 dB
FM Hum & Noise:				
Wideband	60 dB	50 dB	60 dB	50 dB
Narrowband	55 dB	45 dB	55 dB	45 dB
Audio Output, local speaker	4 W at < 2% distortion	4 W at < 5% distortion	4 W at < 2% distortion	4 W at < 5% distortion
Band Spread:				
K1	3 MHz	3 MHz	5 MHz	5 MHz
K2	3 MHz	3 MHz	5 MHz	5 MHz
K3	3 MHz	n/a	5 MHz	n/a
Measurement Compliance	EIA / TIA-204D	TIA / EIA-603	EIA / TIA-204D	TIA / EIA-603
TRANSMITTER				
TKR-7400S				
TKR-7500S				
TKR-8400S				
TKR-8500S				
RF Power Output, no external amplifier	0.1 W to 5 W	15 W to 50 W	0.1 W to 5 W	15 W to 40 W
Duty Cycle, no external amplifier	100%	100% at 25 W	100%	100% at 25 W
RF Power Output with external amplifier*	40 W to 300 W*	40 W to 300 W*	40 W to 250 W*	40 W to 250 W*
Duty Cycle with external amplifier		100%		
Emission Designator:				
Wideband Voice	16K0F3E	16K0F3E	16K0F3E	16K0F3E
Wideband Data (POCSAG)	16K0F1D	n/a	16K0F1D	n/a
Narrowband Voice	11K0F3E	11K0F3E	11K0F3E	11K0F3E
Narrowband Data (POCSAG)	11K0F1D	n/a	11K0F1D	n/a
Spurious Response	70 dB	80 dB	70 dB	80 dB
FM Hum and Noise:				
Wideband	55 dB	50 dB	55 dB	50 dB
Narrowband	50 dB	45 dB	50 dB	45 dB
Local Microphone Impedance		600Ω		
Audio Distortion	< 0.5% at 1000 Hz	< 3% at 1000 Hz	< 0.5% at 1000 Hz	< 3% at 1000 Hz
Band Spread:				
K1	38 MHz	28 MHz	30 MHz	30 MHz
K2	38 MHz	14 MHz	32 MHz	32 MHz
K3	38 MHz	n/a	30 MHz	n/a
Measurement Compliance	EIA-152C	TIA / EIA-603	EIA-152C	TIA / EIA-603
CONTROLLER COMPATIBILITY				
TKR-7400S				
TKR-7500S				
TKR-8400S				
TKR-8500S				
LTR	Yes	Yes	Yes	Yes
PassPort	Yes	No	Yes	No
LTR-Net	Yes	Yes	Yes	Yes
MPT-1327	Yes	Yes	Yes	Yes

*Depends on configuration and equipment options.

Kenwood USA Corp. is committed to a policy of constant improvement in features, quality and performance. To accommodate these improvements, all technical information and specifications are subject to change without notice. Custom options and configurations are available, if needed. For more information, call 1-800-TRUNKING.

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