



# TK-2202/3202

### VHF/UHF FM Portable Radios



The excellent design of Kenwood's compact TK-2202/3202 portables guarantees superior ergonomics. Pick one up and you'll immediately appreciate how easy it is to use. Power is yours to enjoy too as they're equipped with priority scan, built-in VOX and a voice scrambler. You also get reassuring performance in all operating conditions, thanks to MIL-STD 810 & IP54/55 weatherproofing. Indoors or out, rain or shine, the well-built TK-2202/3202 portables set a new benchmark for rugged yet user-friendly operation.

#### **COMPACT DESIGN**

Compact enough to carry anywhere with ease, this smart new radio has a distinctively ergonomic form that's handy to hold and operate. What's more, the radio complete with the KNB-45L battery pack weighs only 280 grams.

#### **OPERATING EASE**

The rotary and key controls on the TK-2202/3202 have been designed to provide the user with positive detent feedback and voice-announcement even if carried and operated undercover or in a pocket.

#### 8 CHANNELS

The TK-2202/3202 provides plenty of capacity for multiple channels or radio systems.

#### **VOX READY**

The TK-2202/3202 offers convenient hands-free operation with a compatible headset. The TK-2202/3202 internal VOX (voice-operated transmission) circuitry provides automatic PTT and a 10-level sensitivity adjustment for different ambient noise levels via software.

#### **SIGNALLING**

Encoder/Decoder function uses QT/DQT to segregate talk groups, so users only hear calls from their own group.

#### **ENHANCED KENWOOD AUDIO**

The TK-2202/3202 provides loud clear audio even in noisy environments.

#### **ROBUST & RELIABLE**

The TK-2202/3202 is built to survive the hard knocks, drops and all weather environments of its users. It meets or exceeds the stringent IP54/55 dust and water intrusion

stringent IP54/55 dust and water intrusion standards and the MIL-STD 810 C, D, E & F environmental standards including the demanding "blowing rain" test.

\*MIL-STD/IPXX compatibility requires use of the terminal cover supplied with the SP-Mic.

# **BUILT-IN VOICE INVERSION SCRAMBLER**

The built-in voice inversion scrambler provides basic protection against casual eavesdropping.

#### SCAN

Multi channel call monitoring can be customized with delete/add scan. Priority Scan automatically checks a primary channel for activity while receiving a call on a non-priority channel. Convenience features such as Priority-channel Stop Tone, Temporary Delete and Revert Channel facilitate user-friendly operation and eliminate confusion.

#### OTHER FEATURES

- Compact & Smart Body 54(W)x122(H)x33(D)mm w/KNB-29N or KNB-45L
- Built-in QT/DQT
- 2 Programmable Function Keys
- Wide/Semi Wide\*/Narrow per channel
- Companded Audio per Channel (Wide/Semi Wide\*/Narrow)
- Voice Annunciation
- Talk Around
- B.C.L. (Busy Channel Lockout)
- Key Lock
- 3-colours LED (Red, Orange, Green)
- Scan Del/Add function
- KENWOOD ESN (Electronic Serial Number)
- Microsoft Windows® PC Programming & Tuning

\*Semi Wide: TK-2202[E]/3202[E] only

# **Options**



**Specifications** 

All accessories and options may not be available in all markets. Contact an authorized Kenwood dealer for details and complete list of all accessories and options.

	TK-2202	TK-3202		
GENERAL				
Frequency Range				
E Type	136 ~ 174 MHz	440 ~ 470 MHz		
E3 Type	_	400 ~ 430 MHz		
Number of Channels		8		
Channel Spacing				
E Type	25 kHz/20 kHz/12.5 kHz	25 kHz/20 kHz/12.5 kHz		
E3 Type	_	25 kHz/12.5 kHz		
Battery Voltage	7.5 V DC ±20 %			
Battery Life	(5-5-90 duty cycle, during hi-power battery saver: OFF/ON)			
with KNB-29N (1500mAh)	Approx. 10 hours/14 hours			
with KNB-45L (2000mAh)	Approx. 12 hours/18 hours			
Operating Temperature Range	-30°C ~ +60°C			
Frequency Stability	±2.5 ppm (-30°C ~ +60°C)			
	50 Ω			
Channel Frequency Spread	38 MHz	30 MHz		
Dimensions (W x H x D), Project	tions not Included			
Radio only	54 x 122 x 21.1 mm			
with KNB-29N/KNB-45L	54 x 122 x 33 mm			
Weight (net)				
Radio only	160 g			
with KNB-29N	360 g			
with KNB-45L	280 g			
Applicable Standards	EN300 086,	EN300 219		

	TK-2202	TK-3202			
RECEIVER					
Sensitivity					
EIA 12 dB SINAD	0.28 μV/0.28 μV/0.35 μV	0.28 μV/0.28 μV**/0.35 μV			
EN 20 dB SINAD 25 kHz/20 kHz**/12.5 kHz	0.63 μV/0.63 μV/0.70 μV	0.63 μV/0.63 μV**/0.70 μV			
Adjacent Channel Selectivity 25 kHz/20 kHz**/12.5 kHz	70 dB/70 dB/62 dB	70 dB/70 dB**/62 dB			
Intermodulation	65 dB	65 dB			
Spurious Response Rejection	70 dB	70 dB			
Audio Output (4 $\Omega$ impedance)	500 mW with less than 10 % distortion				
Measurement	EN Standards				
TRANSMITTER					
RF Power Output (High/Low)	5 W/1 W	4 W/1 W			
Modulation Limiting	±5.0 kHz at 25 kHz	±5.0 kHz at 25 kHz			
	±4.0 kHz at 20 kHz	±4.0 kHz at 20 kHz**			
	±2.5 kHz at 12.5 kHz	±2.5 kHz at 12.5 kHz			
Spurious Emission	-36 dBm≤1 GHz, -30 dBm>1 GHz				
FM Noise (EIA)	45 dB/43 dB/40 dB	45 dB/43 dB**/40 dB			
25 kHz/20 kHz**/12.5 kHz					
Modulation Distortion	Less than 5 %				
Microphone Impedance	2 kΩ				
Measurement	EN Standards				
* E Type only					

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

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# **Applicable MIL-STD & IP**

Standard	MIL 810C Methods/Procedures	MIL 810D Methods/Procedures	MIL 810E Methods/Procedures	MIL 810F Methods/Procedures
Low Pressure	500.1/Procedure I	500.2/Procedure I, II	500.3/Procedure I, II	500.4/Procedure I, II
High Temperature	501.1/Procedure I, II	501.2/Procedure I, II	501.3/Procedure I, II	501.4/Procedure I, II
Low Temperature	502.1/Procedure I	502.2/Procedure I, II	502.3/Procedure I, II	502.4/Procedure I, II
Temperature Shock	503.1/Procedure I	503.2/Procedure I	503.3/Procedure I	503.4/Procedure I, II
Solar Radiation	505.1/Procedure I	505.2/Procedure I	505.3/Procedure I	505.4/Procedure I
Rain*	506.1/Procedure I, II	506.2/Procedure I, II	506.3/Procedure I, II	506.4/Procedure I, III
Humidity	507.1/Procedure I, II	507.2/Procedure II, III	507.3/Procedure II, III	507.4
Salt Fog	509.1/Procedure I	509.2/Procedure I	509.3/Procedure I	509.4
Dust	510.1/Procedure I	510.2/Procedure I	510.3/Procedure I	510.4/Procedure I, III
Vibration	514.2/Procedure VIII, X	514.3/Procedure I	514.4/Procedure I	514.5/Procedure I
Shock	516.2/Procedure I, II, V	516.3/Procedure I, IV	516.4/Procedure I, IV	516.5/Procedure I, IV
International Protection	n Standard			
Dust & Water Protection	IP54/55			

\*To meeet MIL 810 and IP grade, the 2-pin connector cover has to be connected.

Listen to the Future

Kenwood has always connected with people through sound. Now we want to expand the world of sound in ways that only Kenwood can, listening to our customers and to the pulse of the coming age as we head toward a future of shared discovery, inspiration and enjoyment.

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