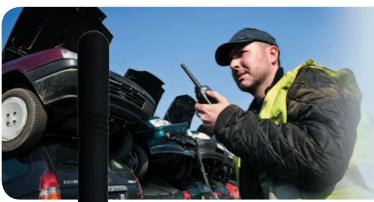
## KENWOOD



# TK-2312E/3312E

## VHF/UHF FM Portable Radios









The new TK-2312/3312 is slim and compact yet packed with features for intuitive operation, impressive performance, and all-weather reliability. Nine programmable function keys allow for customised convenience, and Kenwood's renowned audio clarity means the message gets through loud and clear.

#### **UHF WIDE BAND COVERAGE**

Offering extensive frequency coverage – 70MHz for UHF – the TK-2312/3312 is ideal for a wide range of applications.

#### 128 CHANNELS / 128 ZONES

The 128-channel, 128-zone capacity is ample for any current or future requirement in any radio system.

#### **5W OUTPUT POWER**

Output is 5W for both VHF and UHF.

#### **GPS CONNECTIVITY**

Combined with the optional KMC-48GPS Speaker Mic, the TK-2312/3312 can function as a mobile station for Kenwood's AVL system.

#### 9 PF KEYS

9 programmable functions keys (7 in the front and 2 on the side) allow operation to be customised to fit specific requirements.

#### **EASY OPERATION**

Seven frontal PF keys provide easy one-touch operation. And the 8-character, 13-segment backlit LCD with icons — including a new RSSI display — makes channel information or FleetSync® messaging easy to read, day or night.

#### **4-COLOUR LED INDICATORS**

In addition to the red/orange/green LED indicators, a blue LED has been added for quick visual confirmation.

#### PROGRAMMABLE VOICE INVERSION SCRAMBLER\*

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

\*This function cannot be used in certain countries. Please contact your Kenwood dealer or further information.

#### **SIGNALLING**

■ QT / DQT / DTMF ■ FleetSync® PTT ID, SelCall ■ 5-tone ■ Built-in MDC-1200 signalling FleetSync® and MDC-1200 signalling can be independently selected for each zone. Switching between them is as simple as changing zones.

#### **EMERGENCY FUNCTION**

For hazardous/hostile environments, side PF keys can be programmed for Emergency use to transmit an alert to a predetermined person or group using DTMF, FleetSync® or MDC-1200 signalling.

### **ROBUST & WATER-RESISTANT**

The tough TK-2312/3312 has passed the demanding IP54/55 tests, even with the optional speaker microphone KMC-45 attached (locking bracket required). It also meets or exceeds 11 MIL-STD 810 C/D/E/F/G environmental standards, including "blowing rain".

#### **CLEAR & CRISP, ENHANCED AUDIO**

As an experienced audio specialist, Kenwood has decades of expertise that is reflected in every Kenwood radio — from component selection and construction to optimisation, evaluation and analysis. The resulting audio performance, specially engineered for transceivers, is undeniably clearer and crisper. Just listen to the difference.

#### **OTHER FEATURES**

- Radio stun Priority scan
- Channel / Zone delete & add Key lock
- Compander/VOX/Scrambler setting per channel
- VOX
  T.O.T
  Busy channel lockout
- Operator-selectable tone Password protection
- Wireless clone Self-programming mode
- Talk around
  Compatible with TK-2212/3212 batteries



## **Options**

■ KNB-45L Li-Ion Battery Pack (2.000 mAh)

■ KNB-53N Ni-MH Battery Pack (1,400 mAh)

■ KNR-29N Ni-MH Battery Pack (1,500mAh)

**■ KSC-31** Charger for KNB-53N/29N

■ KSC-35 Rapid Chargei for KNB-45L

■ KSC-316/356 6 Pocket Multiple Charge ■ KRA-22/23 VHF/UHF Low Profile Helical Antenna

■ KRA-26/27 VHF Helical Antenna/ UHF Whip Antenna

■ KMC-48GPS GPS Speaker

■ KMC-45 Speaker Microphone

■ KMC-21 Compact Speaker Microphone

■ KHS-1 Headset with VOX/PTT ■ KHS-7/7A Single-Muff Headset

■ KHS-8BL/BE

■ KHS-9BL/BE

(Black/Beige)

2-Wire Palm Microphone

3-Wire Lapel Microphone

■ KHS-10-BH/-0H

■ KHS-21

■ KHS-23

2-Wire Palm

Microphone

**RECEIVER** 

Modulation

Noise-Reduction Headset with Noise-Cancelling Microphone

with Earphone (Black/Beige)



■ KHS-29F Clip Microphone



**■ EMC-7** Clip Microphone with Earhanger & PTT

■ KEP-2 Earphone Kit (2.5 mm plug)



■ KWR-1 Water Resistant Bag



■ KBH-10 Belt Clip

Contact an authorized Kenwood dealer for details and complete list of all accessories and options.

16K0F3E, 14K0F3E, 14K0F2D, 12K0F2D, 8K50F3E, 7K50F2D



**Specifications** 

with KNB-29N

Applicable Standards

ETSI R&TTE ETSI Safety

TK-2312 TK-3312

Approx. 380 g

EN 300 086, EN 300 113, EN 300 219, EN 301 489

EN 60065, EN 60950-1, EN 60215

**GENERAL** Frequency Range 136 - 174 MHz 400 - 470 MHz Number of Channels / Zones 128 / 128 Channel Spacing 25 kHz / 20 kHz / 12.5 kHz 7.5 V DC ±20 % Operating Voltage Battery Life (5-5-90 duty cycle, save off/on) Approx. 12 hours / Approx. 18 hours with KNB-45L (2000 mAh) with KNB-53N (1400 mAh) Approx. 9 hours / Approx. 12 hours Approx. 10 hours / Approx. 14 hours with KNB-29N (1500 mAh) Operating Temperature Range -30°C ~ +60°C Frequency Stability ±2 5 ppm (-30°C ~ +60°C) Antenna Împedance Dimensions (W x H x D), Projections not Included 50 Ω Radio only 54 x 122 x 21 mm 54 x 122 x 33.7 mm with Battery Weight (net) Radio only with KNB-45L Approx. 180 g Approx. 300 g Approx. 365 g with KNB-53N

TK-2312 TK-3312

All accessories and options may not be available in all markets.

Sensitivity (Wide / Wide 4K / Narrow) EIA 12dB SINAD 0.25  $\mu V$  / 0.25  $\mu V$  / 0.28  $\mu V$ FN 20dB SINAD -3 dB  $\mu$ V (0.35  $\mu$ V) / -3 dB  $\mu$ V (0.35  $\mu$ V) / -2 dB  $\mu$ V (0.40  $\mu$ V) Adjacent Channel Selectivity Wide / Wide 4K / Narrow 70 dB / 70 dB / 62 dB Intermodulation Wide / Wide 4K / Narrow 67 dB Spurious Response Rejection 70 dB Audio Distortion Audio Output Less than 5 % 500 mW / 8 Ω **TRANSMITTER** RF Output Power (High / Low) 5W / 1W ±5.0 kHz at 25 kHz Modulation Limiting ±4.0 kHz at 20 kHz ±2.5kHz at 12.5 kHz Spurious Emission -36 dBm ≤1 GHz, -30 dBm >1 GHz FM Noise (EIA) Wide / Wide 4K / Narrow 45 dB / 45 dB / 40 dB Modulation Distortion Less than 3 % Microphone Impedance 1.8 k $\Omega$ 

Analogue measurements made per EN Standards and specifications shown are typical. Kenwood follows a policy of continuous advancement in development. For this reason specifications may be changed without notice.

FleetSync® is a registered trademark of Kenwood Corporation.

## **Applicable MIL-STD & IP**

International Protection Standard

**Dust & Water Protection** 

Standard	MIL 810C Methods/Procedures	MIL 810D Methods/Procedures	MIL 810E Methods/Procedures	MIL 810F Methods/Procedures	MIL 810G Methods/Procedures
Low Pressure	500.1/Procedure I	500.2/Procedure I, II	500.3/Procedure I, II	500.4/Procedure I, II	500.5/Procedure I, Il
High Temperature	501 1/Procedure I, II	501 2/Procedure I, II	501.3/Procedure I, I	501 4/Procedur <sup>e</sup> I, II	501 5/Procedure I, II
Low Temperature	502.1/Procedure I	502 2/Procedure I, II	502.3/Pr <sup>o</sup> c <sup>e</sup> dur <sup>e</sup> I, II	502 4/Procedure I, II	502.5/Procedure I, II
Temperature Shock	503.1/Procedure I	503.2/Procedure I	503.3/Procedure I	503.4/Procedure I, II	503.5/Procedure I
Solar Radiation	505.1/Procedure I	505 2/Procedure I	505.3/Procedure I	505 4/Procedure I	505.5/Procedure I
Rain	506.1/Procedure I, II	506 2/Proc <sup>e</sup> dure I, II	506.3/Procedure I, II	506 4/Proc <sup>e</sup> dure I, III	506 5/Proc <sup>e</sup> dur <sup>e</sup> I, III
Humidity	507.1/Proc <sup>e</sup> dur <sup>e</sup> I, II	507.2/Procedure II, III	507.3/Pr <sup>o</sup> c <sup>e</sup> dur <sup>e</sup> II, III	507.4	507.5/Proc <sup>e</sup> dure II
Salt Fog	509.1/Procedure I	509.2/Procedure I	509.3/Procedure I	509 4	509.5
Dust	510 1/Procedure I	510 2/Procedure	510.3/Pr <sup>O</sup> cedure I	510 4/Procedure I, III	510.5/Pr <sup>o</sup> cedure I
Vibration	514.2/Procedure VIII, X	514.3/Procedure I	514 4/Proc <sup>e</sup> dur <sup>e</sup> I	514 5/Proc <sup>e</sup> dur <sup>e</sup> I	514.6/Pr <sup>o</sup> c <sup>e</sup> dur <sup>e</sup> I
Shock	516.2/Procedure I, II, V	516.3/Procedure I, IV	516 4/Procedure I, IV	516 5/Procedure I, IV	516 6/Procedure I, IV

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 enjoyments.

## JVCKENWOOD U.K. Limited

IP54/55

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