

New Product Release Information

TK-2406M
TK-3406M2

VHF FM Transceiver
UHF FM Transceiver

March 2013



TK-2406M

TK-3406M2

1. SCHEDULE

Mass Production

TK-2406 M

March 2013

TK-3406 M2

March 2013

2. MAIN FEATURES

Newly Adopted 1W BTL Amplifier Enhances Kenwood Audio

The TK-2406/3406 provides loud clear audio even in noisy environments by using a newly adopted BTL Audio Amplifier, which provides 1W AF output power* (1W @12ohm, Less than 10% distortion). * SP-Mic Out: 500 mW / 8Ω (External Output)
Kenwood has utilized its longstanding audio heritage to optimize voice frequency components so that the audio output cuts through typical ambient noise. This enhancement and the companded noise reduction provide clarity and low distortion especially on narrow bandwidth systems.

Wide Band Coverage (70MHz in UHF)

The TK-2406/3406 offer wide frequency coverage, 38MHz band-spread for VHF (136-174 MHz) and 70MHz band-spread for UHF (400-470 MHz).

Programmable Built-In Voice Inversion Scrambler

The built-in voice inversion scrambler provides basic protection against casual eavesdropping. It is possible to have a unique scrambler setting for each channel by picking the voice inversion frequency from one of 16 tables.

**This function cannot be used in certain countries, for instance in Egypt.
Please contact your Kenwood dealer for further information.*

Voice Announcement

The rotary and key controls on the TK-2406/3406 have been designed to provide the user with voice-announcement even if carried and operated undercover or in a pocket. The initial language of the voice annunciation function is set to English. The radio announces the radio status or mode when you operate the radio. Several languages* are selectable. *English, French, Spanish, Russian

4-colours LED (Blue, Red, Orange and Green)

On top of existing colours (Red, Orange and Green), the TK-2406/3406 has a Blue LED. With this variety of colour LEDs, radio users can recognize the caller when the radio receives a selective call transmission.



16 Channels with Channel Stopper

The TK-2406/3406 offers 16 channel capacity and there is now a "Channel stopper" to enhance operability when using only a few channels; easy to set up, this feature limits the maximum number of channels to 4, 8 or 12.

UHF 5W OUTPUT POWER

Output is 5W for both VHF and UHF.

GPS Ready

The TK-2406/3406 Series can be used in conjunction with the KMC-48GPS optional speaker microphone and the KAS-10 PC software*, making it ideal for human location management applications.

** The TK-2406/3406 works as subscriber terminal in conjunction with a mobile radio configured as a Base station.*

Priority Scan

Scanning is a simple way to monitor multiple channels. There are both standard and priority scan modes available with the TK-2406/3406. And Talk Back allows you to respond immediately to a call regardless of the pre-programmed or selected scan revert channel.

Programmable Function Keys

2 PF Keys are programmable for any features allowing the transceiver to be customized to fit users' specific requirements.

The functions can be assigned both Press and Hold operation.

Robust & Water Resistant

The TK-2406/3406 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 standards and the MIL-STD 810 C, D, E, F & G environmental standards. It still meets IP54/55 when used with the KMC-45 external speaker microphone.

Variety of Signalling

- QT/DQT/DTMF
- FleetSync® PTT ID, SelCall
- 2-tone (encode/decode) / 5-tone (encode/decode)
- Built-in MDC-1200 signalling Wide /Narrow per channel

FleetSync® and MDC-1200 signalling can be selected independently for each zone. By changing a zone the user can very simply switch between the desired signalling formats.

Emergency Function

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

Lone Worker Function

This ingenious feature provides an extra layer of security and safety for individuals. As long as the buttons are pressed regularly, the radio operates normally; however, if there is a long lapse (programmable), it will sound an alert. In the absence of further response from the user, the TK-2406/3406 will place an emergency call to a predetermined person or group of people.

Lone Worker function can be used in combination with other Emergency functions.

Stun Function

This function disables a lost or stolen radio over the air, eliminating security risks.

VOX Ready

The TK-2406/3406 offers convenient hands-free operation with a compatible headset. The TK-2406/3406 internal VOX (voice-operated transmission) circuitry provides automatic PTT and a 10-level sensitivity adjustment for different ambient noise levels.

Independent Setting Per Channel (VOX, Compander, Scrambler)

The TK-2406/3406 can be dealer-programmed with VOX, Scrambler and Compander functions "per channel". If you program the same frequency on different channels, you can easily switch the function on/off by selecting the appropriate channel.

3. OTHER FEATURES

■ Voting ■ Transceiver Password Feature with Voice ■ Companded Audio per Channel ■ Talk Around ■ B.C.L. (Busy Channel Lockout) ■ Key Lock
■ Scan Del/ Add function ■ KENWOOD ESN (Electronic Serial Number)
■ Adjustable Microphone Sensitivity by FPU only: High/ Normal/ Low ■ Microsoft Windows® PC Programming & Tuning
Windows® is a registered trademark of Microsoft Corporation in the United States and other countries.

4. SUPPLIED ACCESSORIES

- Rapid Charger : KSC-43L (with European plug)
- Battery : KNB-53N
- Belt Clip : KBH-10
- User Manual : English, Russian
- Channel stopper

****Note: exclude Antenna. Order selected Antenna separately.***

5. QUALITY CONTROL

ISO 9001 Quality Management for Manufacturing

TK-2406/3406 are manufactured in Kenwood's Singapore factory which has been assessed and registered as ISO9001 compliant. ISO9001 is the international standard for Quality Management Systems.

Kenwood Original Quality Test Standards for Products

Each transceiver has passed Kenwood's original quality tests, which simulate years of sustained, demanding use in harsh operating conditions. These tests are more extreme than any of the accepted Industry Standards.

6. OPTIONAL ACCESSORIES

New Optional Accessories

- KSC-43 Dual Chemistry Rapid Charger for KNB-53N,29N,45L (KSC-31 replace)
- KLH-187 Nylon case
- KRA-41 VHF Stubby Antenna (80mm)
- KRA-42 UHF Stubby Antenna (55mm)

Existing Optional Accessories

- KNB-45L Li-Ion Battery Pack (2000mA)
- KNB-53N Ni-MH Battery Pack (1400mA)
- KNB-29N Ni-MH Battery Pack (1500mA)
- KSC-35S Single Chemistry Rapid Charger for KNB-45L
- KSC-316 6 Pocket Multiple Charger for KNB-53N,29N
- KSC-356 6 Pocket Multiple Charger for KNB-45L
- KMB-35 Six Unit Charger Adapter
- KSC-35SCR Charger Pocket for KMB-35
- KRA-22 VHF Low Profile Helical Antenna
- KRA-23 UHF Low Profile Helical Antenna
- KRA-26 VHF Helical Antenna
- KRA-27 UHF Whip Antenna
- KMC-21 Compact Speaker Microphone
- KMC-45 Speaker Microphone
- KMC-48GPS GPS Speaker Microphone
- KHS-1 Headset with PTT/VOX
- KHS-7 Single Muff Headset
- KHS-7A Single Muff Headset w/ in-line PTT
- KHS-8BL/BE 3-Wire Lapel Mic w/ Eaphone
- KHS-9BL/BE 2-Wire Palm Mic w/ Eaphone
- KHS-10 Heavy-duty headset
- KHS-21 Headset
- KHS-22 Behind-the-head Headset w/PTT
- KHS-27 D-Ring In-line PTT Headset
- KHS-29F Headset
- EMC-11 Clip Microphone with Earphone
- KBH-10 Belt Clip
- KWR-1 Water Resistance Bag
- KLH-131PC(TBD) Leather case

Programming Accessories for Dealers

- KPG-22U USB Programming Cable
- KPG-158DM FPU

7. SPECIFICATIONS

| General | | TK-2406 M | TK-3406 M2 |
|--|--|--|-------------|
| Frequency Range | | 136-174 MHz | 400-470 MHz |
| Number of Channel | | Max. 16ch | |
| Channel Spacing | | 25 / 12.5 kHz | |
| Antenna Impedance | | 50 ohm | |
| Operating Voltage | | 7.5V DC±20% | |
| Battery Life (5-5-90, Save OFF) | | KNB-53N : approx. 9 hours KNB-45L : approx. 12 hours | |
| Operating Temperature Range | | -30°C* to +60°C | |
| Frequency Stability (-30°C to +60°C) | | ± 2.5 ppm | |
| Dimensions (W x H x D) | | with KNB-53N with KNB-45L | |
| Weight | | 54 x 122 x 33.7 mm Main body: 160 g with KNB-53N: 365 g with KNB-45L: 280 g | |
| Environmental Specification and IP Rating | | IP54/55, MIL-STD-810 C,D,E,F,G | |
| Receiver | | TK-2406 M | TK-3406 M2 |
| Sensitivity(25 / 12.5 kHz) EIA 12dB SINAD | | 0.25 μV / 0.28 μV | |
| Selectivity (25 / 12.5 kHz) | | 70 dB / 60 dB | |
| Intermodulation Distortion (25 / 12.5 kHz) | | 70 dB / 60 dB | |
| Spurious Response | | 70 dB | |
| Audio Distortion | | Less than 10% | |
| Audio Output (8 ohm impedance) | | 1 W / 12Ω (Internal Speaker) 500 mW / 8Ω (External Output) | |
| Transmitter | | TK-2406 M | TK-3406 M2 |
| RF output Power | | 5W / 1W | |
| Spurious Response | | 70 dB | |
| FM Ham & Noise (25 / 12.5 kHz) | | 45 dB / 40 dB | |
| Modulation (25 / 12.5 kHz) | | 16K0F3E, 11K0F3E | |
| Audio Distortion | | Less than 5 % | |

Measurements made per TIA/EIA 603 and specifications shown are typical.

Kenwood follows a policy of continuous advancement in development.

For this reasons, specifications may be changed without notice.

**Operating temperature range of the KNB-45L: -10°C ~ +60°C*