KENWOOD

New Product Information
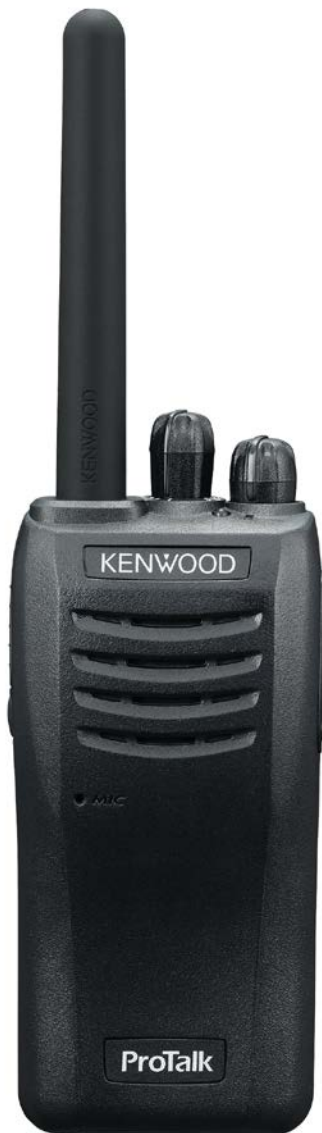
ProTalk
PMR446 TRANSCEIVER

TK-3501
UHF FM TRANSCEIVER

Kenwood Analogue ProTalk 446

The new value choice for professional users

The new **TK-3501** hand-portable is designed for 'Simplicity', making it the ideal license-free radio for use by everybody, from beginners to experts.

The TK-3501 is the natural successor to the legendary ProTalk TK-3301and is sure to win a strong base of dedicated users quickly. It will be launched alongside the TK-3401D dPMR446 and between them will take Kenwood's leadership in professional PMR446 to new heights.

Key Benefits

- Hassle-free with no license required

- Simple and easy to use

- Proven Kenwood performance and durablility

- Compact and robust

- Enhanced audio volume with 1.5W BTL amplifier

- User programmable without requiring software

- Extended talk range - the precision tuned RX section and optimised antenna enables wider area coverage.

- Complies with ETSI standards for analogue PMR446 license-free radio

- Ideally suited to professional users requiring a simple, easy to operate, license-free radio communications solution

- TK-3301 audio accessories are compatible with this model

How will Kenwood market the TK-3501 ProTalk?

The **TK-3501 analogue** ProTalk will be launched across Europe alongside the new TK-3401D digital ProTalk to ensure that together, we capitalise on the strength of the ProTalk series proven performance and reputation across both analogue and digital formats.

These brand new hand-portables share the DNA of our license-free radios originating in 1998 with the TK-361 SRBR radio.

As you are more than aware, since then, every generation of ProTalk PMR446 radios have proved themselves to not only be class-leaders in terms for performance and durability, but in the sales charts too as the radio of choice for professional users around the world.

The new products will be launched in press and online advertising and supported by PR activity from May 2014.

The advertisement clearly positions the new hand-portables as the ultimate evolution in PMR446 - whether analogue or digital - and underlines Kenwood's heritage in license-free PMR446.

Either way, customers can choose between two of the best PMR446 hand-portables available.

▼ **Press Advertisement**

▼ **Online Advertisement**

Product Schedule

MODEL NAME	TYPE	PRODUCTION	LAUNCH	FREQ	TX PWR	INST MANUAL
TK-3501	E	April 2014	May 2014	446 MHz	0.5 W	E,S,G,F,D,I,T,Gr,P
	T					E

I/M Language: E: English, S: Spanish, G: German, F: French, D: Dutch, I: Italian, T: Turkish, Gr: Greek, P: Portuguese

PROGRAMMING CD	TYPE	PRODUCTION	LAUNCH	NOTE
KPG-173D	M	April 2014		

Key Features

Simple and easy to use - No license required

This license-free two-way radio comes with a 1130mAh Li-Ion rechargeable battery, battery charger and belt clip; there's no need to buy extra accessories for basic operation. It is ready to use right away.

Compact, reliable and robust

Users will appreciate just how light (210g) this radio is. Yet, there is no compromise on build integrity; it meets or exceeds the IP54 dust and water intrusion standards as well as MIL-STD 810 C, D, E, F & G environmental standards, making it tough enough for outdoor use in any weather.

Enhanced audio quality

The powerful BTL amplifier and large size speaker deliver 1.5 watt audio output, providing clear and crisp audio.

Built-in self programming

Users can change several settings, channel frequency, QT tone or DQT code without using FPU.

Extended talk range

With the receivers' RX circuit optimised to the fixed antenna, talk range can now extend up to 9km (in open locations).

Other Features

- Single priority scan
- Built-in QT/DQT encode/decode
- Keylock
- Proceed tone/PTT release tone
- Busy channel lock out

- Adjustable microphone gain (by FPU)
- Built-in VOX
- Preset 10-calling alert
- All reset mode

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Optional Accessories

•	KNB-63L	Li-Ion Battery (1130 mAh)
•	KNB-65L	Li-Ion Battery (1520 mAh)
•	BT-16	Battery case
•	KSC-35S	Rapid Charger for Li-Ion Battery
•	KSC-356	6 Pocket Multiple Charger
•	KSC-35SCR	Battery Charger Pocket
•	KSC-43	Rapid Charger
•	KMB-35	6 Unit Charger Adapter
•	KVC-22	Mobile Vehicle Charger Adapter
•	KMC-21	Lightweight Speaker-Microphone
•	KMC-45	Heavy-duty Speaker-Microphone
•	KEP-2	Earphone kit for KMC-45
•	KHS-1	Headset with a boom-mic. and PTT/VOX
•	KHS-7	Single Headset with a boom-mic.
•	KHS-7A	Single Headset with a boom-mic. and inline-PTT
•	KHS-8BL/BE	2-wire Microphone Kit
•	KHS-9BL/BE	3-wire Microphone Kit
•	KHS-10-OH	Heavy-duty Noise Reduction Headset with inline-PTT
•	KHS-21	Headset with a boom-mic.
•	KHS-22	Behind-the-neck Headset
•	KHS-29F	Headset
•	EMC-11	Clip Microphone with Earphone
•	EMC-12	Clip Microphone with Earphone
•	KBH-18	Belt-Clip
•	KLH-197NC	Nylon Case
•	KWR-1	Water Resistant Bag

Programming Accessories for Dealers:

•	KPG-22U	USB Programming Cable
•	KPG-173D	Programming Software

Supplied Accessories

- Instruction manual
- Belt Clip*   (Short type)
- Rapid charger   (KSC-35S)
- Li-Ion Battery   (KNB-63L)

* Same as part No.J29-0751-*5 for TK-2000 series . Not KBH-18.

Specifications

(All specifications subject to change without prior notice)

Frequency Range		446.0 to 446.1 MHz
Number of Channels		16ch
Channel Spacing		12.5 kHz
Operating Voltage		7.5V DC±20%
Battery Life (5-5-90) (battery save on)	*with KNB-63L*	20 hours
	with KNB-65L	26 hours
Battery Life (5-5-90) (battery save off)	*with KNB-63L*	14 hours
	with KNB-65L	18 hours
Operating Temperature Range*		-20°C to +60°C
Frequency Stability		± 2.5 ppm
Dimensions (W x H x D) with KNB-63L		54 x 117 x 25.5mm
Weight		Main body: 140 g (with KNB-63L : 210 g)
RF Power output		ERP 500 mW
Audio Output	*Internal Speaker*	1.5 W / 8 Ω
	External Output	500 mW / 8 Ω
Modulation		8K50F3E

*Radio only. Batt (-10c to +60c)
All specifications shown are typical.
Analogue measurements made as per EN 300 296-2,EN300 341-2.
Digital measurements made as per EN301 166-2.

Operating Range

Open location (no obstructions)   **Up to   9 km**
 (Current model TK-3301   Up to   6.4 km)

Operating range will vary based on terrain and other conditions.

Default Frequency, Tone and Common ID Setting

Analogue PMR446 channel

Channel Number	Operating Frequency (MHz)	Signaling
1	446.00625	94.8Hz
2	446.09375	88.5Hz
3	446.03125	103.5Hz
4	446.06875	79.7Hz
5	446.04375	118.8Hz
6	446.01875	123.0Hz
7	446.08125	127.3Hz
8	446.05625	85.4Hz

Channel Number	Operating Frequency (MHz)	Signaling
9	446.153125	107.2Hz
10	446.159375	110.9Hz
11	446.165625	114.8Hz
12	446.171875	82.5Hz
13	446.178125	D132N
14	446.184375	D155N
15	446.05625	D134N
16	446.08125	D243N

Applicable MIL-STD & IP Rating

Military Standard	METHOD / PROCEDURES				
	MIL810-C	MIL810-D	MIL810-E	MIL810-F	MIL810-G
Low Pressure	500.1 Procedure I	500.5 Procedure I, II	500.3 Procedure I, II	500.4 Procedure I, II	500.5 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	501.5 Procedure I, II
Low Temperature	502.1 Procedure I	502.2 Procedure I, II	502.3 Procedure 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 II	506.2 Procedure II	506.3 Procedure II	506.4 Procedure III	506.5 Procedure III
Humidity	507.1 Procedure I, II	507.2 Procedure II, III	507.3 Procedure II, III	507.4	507.5 Procedure 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 I	510.3 Procedure I	510.4 Procedure I, III	510.5 Procedure I
Vibration	514.2 Procedure VIII, X	514.3 Procedure I	514.4 Procedure I	514.5 Procedure I	514.6 Procedure 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
International Protection Standard					
Dust & Water Protection	IP54				

Applicable condition table for MIL standard (dust & rain) & IP-54
Remarks: All standards applicable when used with accessory connector cover.