

**ProTalk**

PMR446 TRANSCEIVER

Analogue

**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-3301 and 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 durability
- 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
- TK3301 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.

**KENWOOD**

**ProTalk Digital**  
The Evolution of PMR446

NEW TK-3501 ProTalk Analogue

NEW TK-3401D ProTalk Digital

TK-3301 ProTalk Analogue

TK-361 SRBR Analogue

Digital Radio

Kenwood has been at the forefront of license-free two-way radio since the introduction of the TK-361 SRBR in 1998. Since then, the legendary ProTalk series has held the top spot as the preferred choice of professional users. Now, the new TK-3501 analogue is set to continue Kenwood's PMR446 bloodline while the TK-3401D changes the game - a new digital PMR446 radio with 16 channels, increased range, clarity and security and leadership in its DNA.

[www.kenwoodcommunications.co.uk](http://www.kenwoodcommunications.co.uk)

### ▲ Press Advertisement

**ProTalk Digital**  
The Evolution of PMR446

TK-3401D Digital ProTalk

TK-3501 Analogue ProTalk

SRBR

ProTalk

### ▲ Online Advertisement

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, they can choose between two of the best PMR446 hand-portables available.

## Product Schedule

MODEL NAME	TYPE	PRODUCTION	LAUNCH	Freq.	TX PWR	Inst. MANUAL
TK-3501	E	Apr-2014	Apr-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	Apr - 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.

## 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

## 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

- Users 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)

<b>Frequency Range</b>		446.0 to 446.1 MHz
<b>Number of Channels</b>		16ch
<b>Channel Spacing</b>		12.5 kHz
<b>Operating Voltage</b>		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
<b>Operating Temperature Range*</b>		-20°C to +60°C
<b>Frequency Stability</b>		± 2.5 ppm
<b>Dimensions (W x H x D) with KNB-63L</b>		54 x 117 x 25.5mm
<b>Weight</b>		Main body: 140 g (with KNB-63L : 210 g)
<b>RF Power output</b>		ERP 500 mW
<b>Audio Output</b>	Internal speaker	1.5 W/8
	External output	500 mW/8
<b>Modulation</b>		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 per EN301 166-2.

## Default Frequency, Tone and Common ID Setting

### Analogue PMR446 channel

Channel Number	Operating Frequency (MHz)	Signaling	Channel Number	Operating Frequency (MHz)	Signaling
1	446.00625	94.8Hz	9	446.00625	107.2Hz
2	446.09375	88.5Hz	10	446.09375	110.9Hz
3	446.03125	103.5Hz	11	446.03125	114.8Hz
4	446.06875	79.7Hz	12	446.06875	82.5Hz
5	446.04375	118.8Hz	13	446.04375	D132N
6	446.01875	123.0Hz	14	446.01875	D155N
7	446.08125	127.3Hz	15	446.05625	D134N
8	446.05625	85.4Hz	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	500.2/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
<b>International Protection Standard</b>					
Dust & Water Protection	IP54				

Applicable condition table for MIL standard (dust & rain) & IP-54

Remarks: All the standards applicable when used with accessory connector cover.