KANWEE JAPAN

High Performance Two Way Radio

The Technology For
The Next Generation.

K20

PROFESSIONAL TRANSCEIVER

Walkie Talkie (LF) Trans Receiver PMR446Mhz

License Free

The Thin & Compact

Thin, compact, slim & light weight K20 License free Two Way Radio for very **Long-Range** with well-balanced performance.

4500mAh

Lithium Battery Pack.

www.kanwee.in

WPC Approved, Govt order no – 1047 (E)
Dated 18 Oct 2018

K20 PROFESSIONAL TRANSCEIVER

PREMIUM SOUND

High-quality speakers for loud and clear sound even in crowded place.
High-quality Mic Capture voice with crystal-clear audio.

4500mAH

LITHIUM BATTERY

4500mAh Lithium Battery PACK.
Our lithium battery have advantages including higher security, higher reliability, and higher consistency. Excellent product quality, cost-effective lithium batteries, have been highly praised and recognized by international and domestic high-end customers.

ANC (Activate Noise Cancelling) Function

Audio sound active control is a signal- processing methodology that reduces the effective sound amplitude to improve signal-to-noise radio (SNR) so that unwanted noise is less perceptible. The ANC methodology is also called audio noise reduction (ANR). ANC or ANR is based on coherent acoustics that accurately replicate the original sound field in all its forms. This radio equipped with the ANC (active Noise Cancelling) function, can help you hear clear in the noisy environment.

16 CHANNELS Self Programming

The radio have "channel selector" control knob on the radio, allowing the to select one of (usually) 16 "channels".
But each one of these "channels" can be set to one of many, many actual frequencies.
K20 professional walkie-talkie can be programmed to use any of many of frequencies can be set to use frequencies between 446 – 446.2MHz.

Multi-Colored LED Light

Blinking LED light Indicate the transmission status, turns red when transmit & turns green when receive.

KEY FEATURES

ANC (ACTIVATE Noise Cancelling) Function / TOT / Scan / CTCSS/DCS / English Voice Prompt / Battery Saving Function / Low Battery Alert / Hi-low Power Selectable / Wide-Narrow Band Selectable / VOX / Programming Protect / Busy Lock Function / Squelch Level Selectable / Scrambler / One-Key Frequency Copy / Frequency Copy (Over The Air)

SPECIFICATIONS

General	
Frequency Range	446-446.2MHz
Channel	16
Working Voltage	7.4VDC
Working Temperature	-20°C+60°C
Antenna	High Gain Antenna
Antenna Impedance	50 Ω
Mode of operation	Simplex or Semi-duplex
Weight	140g (4500mAh)
Dimension	131×58×34.5 mm
Transmitter	
Frequency Range	446-446.2MHZ
RF Power	0.5W
Modulation Type	FM
Spurious Radiation	≤7.5 μ W
Modulation Noise	<-40dB
Modulation Distortion	<5%
Frequency Stability	5ppm
Max Fr. Deviation	≤± 5KHz
Current	≤ 1200mA
Audio Response (300-3400Hz)	+6.5~-14dB
Adjacent Ch. Power	≥65dB
Receiver	
Frequency Range	446-446.2MHZ
Sensitivity	≤0.2 μ V
Occupied Bandwidth	≤16KHz
Selectivity	≥65dB
Intermodulation	≥55dB
Audio Power Output	1W
Audio Distortion	≤5%
Frequency Stability	5ppm
Current	Standby 55mA Working 150Ma
Audio Response (300-3400Hz)	+7~-12.5dB

ACCESSORIES INCLUDES IN BOX

4500mAH
LITHIUM BATTERY

Charger

Hi-Gain Antenna

Belt Clip

OPTIONAL ACCESSORIES

C Type Handsfree

D Type Handsfree

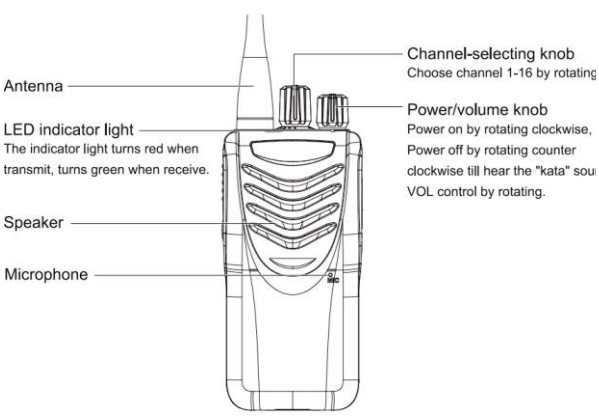
Clear Tube Handsfree

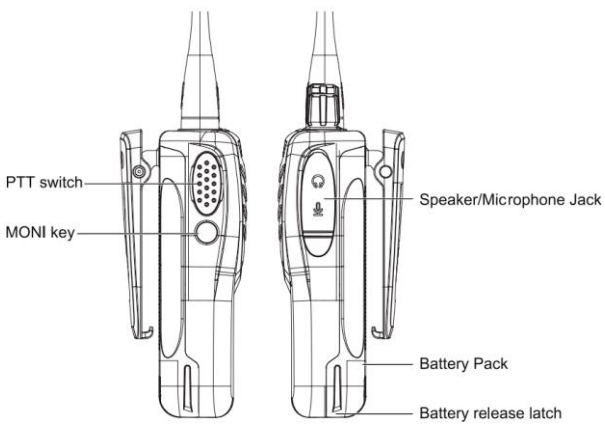
Boom Mic Handsfree

Water Proof Cover

Programming Cable

GETTING ACQUAINTED





रजिस्ट्री सं० डी० एल०-33004/99 REGD. NO. D. L.-33004/99

भारत का राजपत्र
The Gazette of India

असाधारण
EXTRAORDINARY
भाग II—खण्ड 3—उप-खण्ड (i)
PART II—Section 3—Sub-section (i)
प्राधिकार से प्रकाशित
PUBLISHED BY AUTHORITY

सं. 753] नई दिल्ली, बृहस्पतिवार, अक्तूबर 18, 2018/आश्विन 26, 1940
No. 753] NEW DELHI, THURSDAY, OCTOBER 18, 2018/ASVINA 26, 1940

संचार मंत्रालय
(बेतार योजना एवं समन्वय स्कंध)
अधिसूचना

नई दिल्ली, 18 अक्तूबर, 2018

सा.का.नि.1047(अ).—केंद्रीय सरकार, भारतीय तार अधिनियम, 1885 (1885 का 13) की धारा 4 और धारा 7 तथा भारतीय बेतार तारयांत्रिकी अधिनियम, 1933 (1933 का 17) की धारा 4 और धारा 10 द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए निम्नलिखित नियम बनाती है, अर्थात्: —

1. **संक्षिप्त नाम और प्रारंभ** - (1) इन नियमों का संक्षिप्त नाम निम्न शक्ति और अति निम्न शक्ति शोर्ट रेंज रेडियो आवृति युक्तियों का उपयोग (अनुज्ञप्ति की अपेक्षा से छूट) नियम, 2018 है ।

(2) ये राजपत्र में उनके प्रकाशन की तारीख को प्रवृत्त होंगे ।

2. **परिभाषाएं**-- इन नियमों में, जब तक कि संदर्भ से अपेक्षित न हो, --

(क) "अधिनियम" से भारतीय तार अधिनियम, 1885 (1885 का 13) अभिप्रेत है;

(ख) "प्राधिकारी" से भारतीय तार अधिनियम, 1885 (1885 का 13) की धारा 4 की उपधारा (2) के अधीन केंद्रीय सरकार द्वारा अधिसूचित प्राधिकारी अभिप्रेत है;

(ग) "प्रभावी विकिरण शक्ति (दी गई दिशा में) " अथवा ई.आर.पी से अभिप्रेत है; दी गई दिशा में एंटीना को भेजी गई शक्ति और "हाफ-वेव ध्रुव ऐन्टेना " के सापेक्ष इसके सिग्नल में बढोत्तरी का गुणांक।

(घ) "समतुल्य समस्थानिक विकिरण शक्ति" से अभिप्रेत है, ऐन्टेना के सबसे मजबूत किरणपुंज की दिशा में वास्तविक स्रोत के रूप में वही सिगनल सामर्थ्य देने की कुल शक्ति जिसे एक कल्पित समस्थानिक ऐन्टेना द्वारा विकिरणित किया जाना है;

MINISTRY OF COMMUNICATIONS

(Wireless Planning and Coordination Wing)

NOTIFICATION

New Delhi, the 18th October 2018

G.S.R. 1047(E).—In exercise of the powers conferred by sections 4 and 7 of the Indian Telegraph Act, 1885 (13 of 1885) and sections 4 and 10 of the Indian Wireless Telegraphy Act, 1933 (17 of 1933), the Central Government hereby makes the following rules, namely:

1. Short title and commencement.— (1) These rules may be called the Use of Low Power and Very Low Power Short Range Radio Frequency Devices (Exemption from Licensing Requirement) Rules, 2018.

(2) They shall come into force on the date of their publication in the Official Gazette.

2. Definitions.— In these rules, unless the context otherwise requires, -

(a) "Act" means the Indian Telegraph Act, 1885 (13 of 1885);

(b) "Authority" means the authority notified by the Central Government under sub-section

(2) of section 4 of the Indian Telegraph Act, 1885 (13 of 1885);

(c) "effective radiated power (in a given direction)" or e.r.p. means the product of the power supplied to the antenna and its *gain relative to a half-wave dipole* in a given direction;

(d) "equivalent isotropic radiated power" or e.i.r.p. means the total power that would have to be radiated by a hypothetical isotropic antenna to give the same signal strength as the actual source in the direction of the antennas strongest beam;

(e) "power density" means the total energy output per unit bandwidth from a pulse or sequence of pulses for which transmit power is at its maximum level, divided by the total duration of the pulses;

(f) "duty cycle" means ratio expressed as a percentage of the cumulative duration of transmission T_{on_cum} within an observation interval T_{obs};

duty cycle $DC = \left(\frac{T_{on\_cum}}{T_{obs}}\right)_{F_{obs}}$ on an observation bandwidth F_{obs}

(g) words and expressions used in these rules and not defined but defined in the Act and the Indian Wireless Telegraphy Act, 1933 (17 of 1933), shall have the same meanings

respectively as assigned to them in those Acts.

3. Exemption.— No licence shall be required by any person to establish, maintain, work, possess or deal in any wireless equipment for the purpose of usage of low power and very low power short range radio frequency devices or wireless equipment in the frequency band, on non-interference, non-protection and shared and nonexclusive basis, with the equivalent isotropic radiated power or effective radiated power, complying with the technical specification contained in the Tables-I to IX, namely: —

Table-I

Inductive device

S.No.	Frequency range in kHz	Transmit power limit/field strength limit/power density limit	Additional parameters (channeling and/ or channel access and occupation rules)	Other usage restrictions	*EN No.
(1)	(2)	(3)	(4)	(5)	(6)
1	6765-6795	42 dBμA/m at 10 metres			EN 300 330

*EN: is a number and acronym used for Harmonized European Standard as produced by European Telecommunications Standards Institute (ETSI).

Note: For the purpose of this Table, inductive device mean radio devices that use magnetic fields with inductive loop systems for near field communications and typical uses include devices for car immobilisation, animal identification, alarm systems, cable detection, waste management, personal identification, wireless voice links, access control, proximity sensors, anti-theft systems, including radio frequency anti-theft induction systems, data transfer to hand-held devices, automatic article identification, wireless control systems and automatic road tolling.

Table -III

High duty cycle or Continuous transmission device

S.No.	Frequency Range in MHz	Transmit power limit/field strength limit/power density limit	Additional parameters (channeling and/or channel access and occupation rules)	Other usage restrictions	*EN No.
(1)	(2)	(3)	(4)	(5)	(6)
1	87.5-108	50 nW e.r.p.			EN 301 357

*EN: is a number and acronym used for Harmonized European Standard as produced by European Telecommunications Standards Institute (ETSI).

Note: For the purpose of this Table, high duty cycle or continuous transmission device mean radio device that rely on low latency and high duty cycle transmissions and used for personal wireless audio and multimedia streaming systems used for combined audio or video transmissions and audio or video sync signals, mobile phones, automotive or home entertainment system, wireless microphones, cordless loudspeakers, cordless headphones, radio devices carried on a person, assistive listening devices, in-ear monitoring, wireless microphones for use at concerts or other stage productions, and low power analogue FM transmitters (band 36).

Table -IV

Assistive listening device

S.No.	Frequency range in MHz	Transmit power limit/field strength limit/power density limit	Additional parameters (channeling and/or channel access and occupation rules)	Other usage restrictions	*EN No.
(1)	(2)	(3)	(4)	(5)	(6)
1	169.4-169.475	500 mW e.r.p.	Channel spacing: ≤ 50 kHz		EN 300 422
2	169.4875-169.5875	500 mW e.r.p.	Channel spacing: max 50 kHz		EN 300 422

*EN: is a number and acronym used for Harmonized European Standard as produced by European Telecommunications Standards Institute (ETSI).

Note: For the purpose of this Table, assistive listening device covers radio communications systems that allow persons suffering from hearing disability to increase their listening capability. Typical system installations include one or more radio transmitters and one or more radio receivers.

Table -V

Personal Mobile Radio 446 MHz device

S.No.	Frequency range in MHz	Transmit power limit/field strength limit/power density limit	Additional parameters (channeling and/or channel access and occupation rules)	Other usage restrictions	*EN No.
(1)	(2)	(3)	(4)	(5)	(6)
1	446.0-446.2	500 mW e.r.p.	Channel spacing: 6.25 kHz and 12.5 kHz		EN 300 113-2, EN 301 166-2, EN 300 296-2

*EN: is a number and acronym used for Harmonized European Standard as produced by European Telecommunications Standards Institute (ETSI).

Note: For the purpose of this Table, personal mobile radio 446 MHz device means hand portable radio with no base station or repeater use and uses integral antennas only in order to maximise sharing and minimise interference, and which operates in short range peer-to-peer mode and shall be used neither as a part of infrastructure network nor as a repeater;