

Access[®]

High Performance Two Way Radio

TD-5608

Explosion-proof Two Way Radio

DIGITAL & ANALOGUE MODE

**PREPARE TODAY FOR
A SAFE TOMORROW**

Work Safe | Be Safe | Stay Safe

Walkie Talkie (LF) Trans Receiver

PMR446Mhz **License Free**

**THE PROFESSIONAL CHOICE
FOR DANGEROUS AREAS**



IP68

Waterproof IP68

&

Dust Proof

DMR

DIGITAL TWO WAY RADIO



EASY TO OPERATE

The TD-5608 with large PTT, volume, channel knobs and programmable buttons that are easy to use, even when wearing gloves. The bright LED show radio status information at a glance.

These high-performing radio have the highest ATEX gas explosion group rating. Ideal for hazardous work with loud noise, rough weather, long shifts, and dangerous conditions including combustible dust, explosive chemicals, gas leaks, flammable hydrocarbons and more.

EXCEPTIONAL AUDIO | DIGITAL & ANALOGUE | EASY TO USE | 16 CHANNELS FOR EACH ZONE (TOTAL 1500 CHANNELS) | ANC NOISE CANCELLATION | CALL TUNE | EMERGENCY ALERT | VOX/IVOX | MAN DOWN | SCAN | ANI | GROUP CALL / ALL CALL / SINGLE CALL | VOICE ENCRYPTION | MESSAGE | CALL TUNE

Main Features

- 16channels for each zone, totally 1500channels
- 2 programmable side key
- Low voltage alert
- Zone select able
- HI/LO power select
- Emergency alert
- Squelch setting
- Scan
- VOX/IVOX
- Group call/ all call/ single call
- ANI
- Voice encryption
- Message call tone
- Emergency call
- Single frequency repeater
- Noise cancellation
- Man down
- Recorder(500hours) Optional



TD-5608 ATEX RADIO

THE PROFESSIONAL TWO WAY RADIO FOR DANGEROUS AREAS

TD- 5608 combines the best of two-way radio functionality with the latest digital technology. It integrates voice and data seamlessly, offers enhanced features that are easy to use, and delivers increased capacity to efficiently connect all your crews. With exceptional voice quality, long battery life and ATEX-rated for safety, keeps your workers connected safely and productively, wherever the job takes them.



BATTERY PACK

The power supply circuit of the radio battery pack is equipped with a dual electronic current limiting circuit, which can pass the battery and battery pack tests



SAFETY FEATURES

The radio is equipped with a reverse function inside. After this function is activated, if the handheld terminal tilts to a certain angle, it will emit a man down alarm function. The mobile or upright terminal can exit the emergency alarm. Man down alarm allow can be set in CPS software.

Emergency Alarm

In case of emergency, users can seek help from their peers or control center through this feature.

1. Press the programming SOS key to trigger an alarm for the programming contact.
2. When receiving an emergency call, the user can answer it without any operation.
3. The caller can end the alarm in the following ways: after the calling radio ends the emergency call, the alarm will automatically end or turn off the radio.
4. The called person can end the alarm in the following ways:
switch channels or turn off the radio to exit the alarm prompt.

Explosion-proof requirements - Spark ignition test

The circuit of the radio should be able to pass the spark ignition test

Temperature test

The maximum surface temperature of the radio shall not exceed 130°C.

Surface resistance test of non-metallic shell components

According to the provisions of Article 26.13 of GB/T 3836.1-2021, the surface resistance measured on the non-metallic shell of the radio should not exceed 10⁹ Ω.

Battery and battery pack test

The power supply circuit of the radio battery pack is equipped with a dual electronic current limiting circuit, which can pass the battery and battery pack tests

Shell impact resistance test

The shell should be able to withstand an impact test of 1kg and 0.7m.

Dielectric strength test

Intrinsic safety circuits and enclosures should be subjected to a test voltage of 500V and 50HZ, and there should be no breakdown or flash over within 1 minute. The leakage current should be ≤ 5mA.

Drop test

Using a drop tester for testing, the product is free to drop four times from a height of 1 meter above the ground in each posture (6 sides and 4 corners). After the test, the parts are not allowed to be loose or damaged, the battery is not detached from the machine head, the power on work is normal, and the performance meets the requirements.

Premium audio

Hear and speak clearly in loud environments, negate background noise from heavy equipment, engines and trucks.

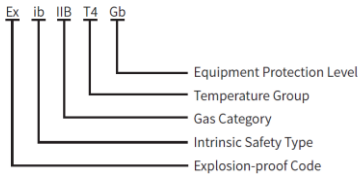
SO RUGGED, IT WITHSTANDS THE WORST

Design of DMR two way radio complies with European directives and standards: 2014/34/EU,EN IEC 60079-0:2018, EN 60079-11:2012.Ex marking of the equipment:

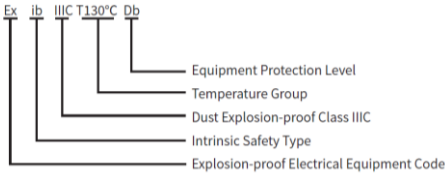


II 2GD Ex ib IIB T4 Gb Ex ib IIIC T130°C Db

Explosion-proof Mark



Technical Parameters



SPECIFICATION

Model	TD-5608
Channel capacity	16
Channel spacing	Digital: 12.5KHz
Working voltage	DC 7.4V
Frequency range	446.00 - 446.20MHz
Standard battery	BL-2450EX (7.4VDC 6500mAh)
	Li-ion battery
Working current	<1300mA
Working temperature	-20℃ ~ +50℃
Storage temperature	-40℃ ~ +80℃
Weight	295g
Size: HxWxD(mm)	132.25 mm x 60.6 mm x 38.25 mm
IP rating	IP68
Output power	<3.5W
Explosion-proof certified accessories	E104PT22EX-UV99 earphone
	SM07EX-UV99 handheld microphone



Environment condition

The radio should be able to operate reliably for a long time in the following environmental conditions:

- Environmental temperature: -20℃~+50℃;
- Atmospheric pressure: 80kPa~110kPa;
- Relative humidity: ≤ 90% (at+25℃);
- There are explosive hazardous areas formed by the mixing of combustible gases from groups IIA to IIC and T1 to T4 with air, or environments in zones 21 and 22 where dust explosive gas mixtures may occur;
- The requirements for environmental adaptability should also comply with the relevant provisions of Table 12 in GB/T 15844-2017.



STANDARD ACCESSORIES



Charger



6500mAh
LITHIUM
BATTERY



Belt Clip



Hi-Gain
Antenna

OPTIONAL ACCESSORIES



C Type
Handsfree



D Type
Handsfree



Clear Tube
Handsfree



Boom Mic
Handsfree



Throat Mic
Headphone



Microphone



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 स्क्व)

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 आवृत्ति 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-वेब 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 सिग्नल 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} :

$$\text{duty cycle } DC = \left(\frac{T_{on_cum}}{T_{obs}} \right) \times 100 \text{ on an observation bandwidth } F_{obs}$$

(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;