NX-230EX/ NX-330EX SAFETY MANUAL FOR HAZARDOUS LOCATIONS

This manual includes additional information to the Instruction Manual.

KENWOOD Corporation

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ATEX AND IECEX APPROVAL

Please read this manual very carefully before using the transceiver



IMPORTANT SAFETY INFORMATION

This manual contains safety information and recommendations that must be complied with in order to guarantee the safe function of the transceiver under conditions recommended by JVC KENWOOD. Non compliance with these safety recommendations and instructions may have dangerous consequences, infringe regulations or void the safety certification.

For operating this transceiver in a location where hazardous concentrations of flammable materials exist, users are advised to be familiar with the subject of intrinsic safety.

SAFETY REGULATIONS

When using the transceiver the user is required to follow the usual safety advice to prevent any dangerously unsafe situations.

- Do not use the transceiver with equipment not certified by ATEX/ IECEx. An explosion or fire may result.
- Do not use the transceiver with Battery pack, accessories or options in a hazardous atmosphere if they have been physically damaged. An explosion or fire may result.
- To prevent ignition within a hazardous atmosphere, the battery pack must only be charged in areas known to be non-hazardous. Battery Chargers are not ATEX/ IECEx approved products and are not to be brought into or used in hazardous locations. Use only Battery Chargers specified by JVC KENWOOD.

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- Do not disassemble or modify ATEX/ IECEx approved products.
- ATEX/ IECEx approved products may be repaired only by an ATEX/ IECEx approved, JVC KENWOOD designated Authorized Service Center.

SPECIAL CONDITIONS FOR SAFE USE

Do not expose the equipment to high impact risks.

MARKING AND MEANING

ATEX	00 84 5 7	
\overline{c}	II 2G Ex ib IIC T4 Gb	:Gas
< <u>₹</u> (2)	II 2D Ex ib IIIC T110°C Db	:Dust
	IP65/IP67	:All
IECEx	88 5 0	
	Ex ib IIC T4 Gb	:Gas
	Ex ib IIIC T110°C Db 0 IP65/IP67	:Dust
	ID65/ID67	:All

Equipment group

II: All explosive areas other than mining

equipment category

2G: Gas; can be used in Zone 1, 2

2D: Dust; can be used in Zone 21, 22

O Types of protection

ib: Intrinsic safety

Explosion group

IIC: Most dangerous group (e.g.hydrogen) (Gas) **IIIC:** Conductive $R \le 10^9 \Omega$ (Dust)

Temperature classes

T4: 135°C

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6 Maximum surface temperature

T110°C: 110°C

Equipment protection level

Gb, Db: High level protection

IP code

- 6x: Dust proof (complete protection against dust)
- x5: Waterproofing (protection against water jets)
- x7: Waterproofing (protection against temporary immersion in water)

Ex- CERTIFICATION DATA

- ♦ Operating temperature range: -20 °C ~ +50 °C
- RF power output: less than 2 W (limit for gas group IIC of IEC 60079-0)
- Intrinsically safe specifications for the universal connector for ATEX certified electrical equipment. (is parameter)

is - parameter	NX-230EX and NX-330EX	
	at universal connector in total for all pins	
inside or outside hazardous areas	$ \begin{array}{l} Uo = 6.51 \ V \\ Io = 310 \ mA \\ Po = 2.02 \ W \\ Co = 2.5 \ \mu F^* \\ Lo = 20 \ \mu H^* \end{array} $	

*: Do not connect equipment exceeding the values (Ci \leq Co and Li \leq Lo) of the above table. An explosion or fire may result.

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Use the following transceivers and accessories in hazardous areas:

Product Name	Model Name
VHF Digital Transceiver	NX-230EX(-E, -X)**
UHF Digital Transceiver	NX-330EX(-E, -X)**
Li-ion Battery Pack	KNB-70LEX(-M)
Speaker Microphone	KMC-46EX(-M)
Leather Case	KLH-188EX(-M)
Belt Clip	KBH-16EX(-M)
	KRA-22(-M, -M2, -M3)
	KRA-23(-M, -M2, -M3)
Antenna	KRA-26(-M, -M2, -M3)
Antenna	KRA-27(-M, -M2, -M3)
	KRA-43G(-M, -M2, -M3)
	KRA-44G(-M, -M2, -M3)

**: A number may be added after the "E" and "X".

Note: Products with different letters and numbers within the brackets are not ATEX/IECEx approved.

Do not use the following accessories in hazardous areas:

Product Name	Model Name
Rapid charger	KSC-32S***
Fuse box	KCT-69EX***
Multiple charger	KSC-326S

To prevent ignition in a hazardous atmosphere, accessories must be used only in areas known to be non-hazardous.

***: When charging is required, connect the KCT-69EX to the KSC-32S.

MFD 2013: MFD is the manufactured year of the product.

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