DX-IS Marine Series

Quick Start User Guide

Entel

Designed in the United Kingdom

DX-IS Marine Series

INTRODUCTION

The DX-IS Series is a commercial grade radio intrinsically safe certified to UL913 5th Ed by SGS. Your radio can be configured with Digital and Analogue channels (VHF models analogue only) and to meet your exact requirements the radio may have been customised by your Entel Dealer.

These features will be explained in a separate guide issued by the Dealer.

PACKING LIST
DX Series radio
Li-ion battery pack
Drop in charger
Spring loaded belt clip
High efficiency antenna
Quick start user guide

OPTIONAL ACCESSORIES

Attaching and removing accessories

To attach an accessory, remove the accessory cover by unscrewing the locking screw anticlockwise (leave cover attached or store in a safe place).

Plug the accessory into the socket, then carefully tighten the locking screw clockwise until finger tight (do not over-tighten or use any implement).

To remove an accessory, unscrew the locking screw of the accessory by hand in an anticlockwise direction.

To prevent corrosion or damage to the accessory connector terminals ensure either a) the accessory cover is fitted or b) an accessory is securely fitted, never leave the terminals exposed.

Only use Entel original accessories, use of non-approved 3rd party accessories will invalidate your intrinsically safe approval.

BATTERY INFORMATION

Battery care

DO NOT CHARGE BATTERY IN I.S. AREA!

Battery charging

1. Connect the AC adapter to the charger pod and plug in.
2. Turn the radio off.
3. Insert the battery pack into the charger pod, either with or without the radio attached. The charger LED status light changes to red and charging begins.
4. When charging is complete the charger LED status changes from red to green. A fully discharged battery pack will take approximately 3-6 hours to recharge.

A flashing red LED on the charger indicates there is a problem with the battery. Remove the battery from the charger and consult your Entel Dealer.

CAUTION

BATTERY PACK PRECAUTIONS

- Do not recharge the battery pack if it is already fully charged. Doing so may reduce the life of the battery pack.
- After charging is complete, remove the battery from the charger. If the power to the charger is turned off and on again, charging will restart and the battery will become overcharged.
- Please ensure that the radio is turned off before placing it in the charger and never switch a radio on whilst in the charger.
- Only use battery pack product code CNB450E-IS.
- Do not short the battery terminals or dispose of the battery in a fire.
- Do not charge the radio and/or battery pack if they are wet.
- Risk of explosion if battery is replaced by an incorrect type.
- Dispose of used batteries according to the instructions.
- Storage temp: -20°C ~ +25°C / humidity range: 65 ±20%RH.
- Keep out of reach of children.

DANGER

DO NOT DISASSEMBLE OR MODIFY THE BATTERY IN ANY WAY!

Your Entel battery pack incorporates a safety circuit to avoid danger. If the safety circuit is damaged or bypassed, or the battery cells are damaged directly, they may generate extreme heat, smoke, rupture and emit flames.

REPAIR & MAINTENANCE

Repair and maintenance of this product can only be carried out by Entel. Any damage to the anti-tamper seal will invalidate the product approval. Should you have any difficulties in operating this product please contact your Entel Dealer for support.

CONTROLS & INDICATORS

NON DISPLAY

DISPLAY - UHF MODEL

DISPLAY - VHF MODEL

1. On/Off/Volume control.
   Rotate clockwise to turn on and increase volume. Rotate anticlockwise to reduce volume and turn off.
2. Channel control
3. Accessory socket
4. Push-To-Talk (PTT) button.
   Press to speak and release to listen.
5. Dealer programmable buttons
   (ask your Dealer for more information)
6. LED indicator
   Red Steady - Transmitting
   Red Double Flash - Low Battery
   Red Fast Flash - Error
   Green Steady - Receiving
   Green Steady (AM) - Monitoring Channel
   Green slow flash (DM) - Digital call hang time
   Amber steady - Receiving invalid signal
   Amber Flash every 5-seconds - Radio in standby
   Amber Rapid Flash - Scanning
7. Navigation key - channel up/down
8. Microphone
9. Monitor
10. Quick access channel 16
11. Scan memorised channels
12. Programmable button
13. Memorise channels for scan

How to select INT/USA/CAN modes

Long press Orange or P1 button (subject to your firmware version) to enter Region selection menu.
Short press Orange or P1 button to select the region INT > USA > CAN then press PTT to save the selection.

Model	Description	UL913	Permitted models
CNB450E-IS	2200mAh Li-ion battery pack	✓	DX-IS Series
CMP/DXS-IS	Remote speaker microphone	✓	DX-IS Series
CMP/DXE-IS	Remote speaker microphone ear jack version	✓	DX-IS Series
CHP450D/DX*	Ear defender headset with headband	✓	DX-IS Series
CHP450HS/DX*	Ear defender headset/hardhat/single sided	✓	DX-IS Series
CHP450HD/DX*	Ear defender headset/hardhat/double sided	✓	DX-IS Series
CXR5/DX**	Bone conductive skull microphone & earpiece	✓	DX-IS Series
CXR16/DX**	Bone conductive throat microphone & earpiece	✓	DX-IS Series
EA12/DX	Earpiece microphone & PTT	✓	DX-IS Series
EA15/DX	Acoustic tube earpiece with tie clip microphone & PTT	✓	DX-IS Series
PTT450E/DX	Heavy duty PTT switch for CHP Series	✓	DX-IS Series
PTT451C/DX	Heavy duty PTT switch for CXR Series	✓	DX-IS Series

* CHP450D/DX, CHP450HS/DX and CHP450HD/DX supplied with PTT450E/DX
** CXR5/DX and CXR16/DX supplied with PTT451C/DX

Important: When not using your audio accessory, the radios accessory cover MUST be re-fitted so as to protect the radio and the accessory connector from dirt and liquid ingress / contamination.

Specific conditions of use:
The Entel UL913 transceivers should only be used with the specific, permitted accessories, as detailed above.

PREPARING YOUR RADIO FOR USE

Attaching / removing the antenna

1. To attach, carefully align the antenna with the socket. Screw in the antenna clockwise (taking care not to cross the thread) (A).
2. To remove, unscrew the antenna anti-clockwise (B).

Attaching / removing the battery pack

1. To attach (C), locate the pegs on the bottom of the battery into the slots on the radio and pull the 2 latches downwards, carefully pushing the battery into the radio. Release the latches ensuring the battery is full attached.
2. To remove (D), pull down the 2 latches and carefully pull the battery away from radio.

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SWITCHING ON, RECEPTION AND SWITCHING OFF

1. To switch on rotate the on/off/volume control (1) on the top of the radio clockwise, you will hear a click from the control.
2. When the radio has passed its diagnostic tests, it will emit a fanfare tone.
3. The radio will enter standby mode. This is indicated by the LED flashing amber once every 5 seconds, signaling that the radio is ready for use.
4. Adjust the volume control (1) to select the desired volume level.
5. Using the channel control (2), ensure you have the correct channel selected.
6. When receiving a valid signal, the LED will illuminate steady green and audio will be emitted from the radio's speaker or audio accessory (if attached).
7. When finished using the radio, switch off by turning the on/off/volume control (1) counter clockwise until it clicks and the radio will be switched off.

TRANSMITTING

1. Perform steps 1 through to 5 above.
2. Before transmitting, monitor the channel and make sure it is clear.
3. When receiving a signal, wait until the signal stops before transmitting. The radio cannot transmit and receive simultaneously.
4. Press the Push-To-Talk (PTT) button (4) to begin your transmission. To confirm transmission the LED will illuminate red.
5. For best transmitted speech quality, you must talk directly into the radio's microphone (8) at around 4cm between your mouth and the radio.
6. Please note: if you talk into the top of the radio or with your mouth further away, you will transmit poor quality speech.
7. When the transmission is finished release the PTT button.

DECLARATION OF CONFORMITY

Hereby, Entel UK Limited declares that the radio equipment type DX500 series is in compliance with;

EN 301 178 v2.2.2
EN 300 720 v2.1.1
EN 300 113 v2.2.1 & v3.1.1
EN 301 843-1 v2.2.1
EN 301 843-2 v2.2.1
EN 301 489-1 v2.2.3, EN 301 489-5 v2.2.1
EN 60945:2002, EN IEC 62368-1:2024+A11:2024
EN 50566:2017
EN 62311:2020 & EN 62209-2:2010

* For sale outside of Europe and for non-EU flag vessels

Intrinsically Safe Certified to UL913 by SGS:
ANSI/UL913 5th Ed
Class I, II, III, Division 1, Groups C-G, T4
Class I, Division 2, Groups A-D, T4

UL913		
Atmosphere	Class I II III	Class I – Gas, vapors; Class II – Dust; Class III – Fibers, Flyings
Area Classification (Flammable material present time)	DIV I	Division 1: Gas/Dust normally present in explosive amounts
Gas Types by Group:	Group C	C – Ethylene and related products
Dust Types by Group:	Group G	G – Grain and non-metallic dust
Operating Temperature	-20 to 55	-22°F to 131°F
Temperature Class (Maximum device surface temperature)	T4	135ºC

Name: Mike Jamieson
Position: Quality Manager
Date: 1st Sep. 2026
Signed:

APPROACHABLE ac REGISTERED
UKAS MANAGEMENT SYSTEMS
8320

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For a detailed specification on all products listed please visit our webpage - entel.co.uk

CONTACT

For more information about our products, please contact us:

+44 (0)20 8236 0032 **info@entel.co.uk** **entel.co.uk**

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