DN495 4G LTE PoC Radio

Entel

Designed in the United Kingdom

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IMPORTANT

By using this product you agree to the terms and conditions of Entel's E-PoC Service License which can be viewed here: www.entel.co.uk/EPoC_LICENSE

INTRODUCTION

The Entel DN495 digital radio is designed for those users who demand the ultimate performance for their business critical communications.

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	
DN495	PoC Radio
CNB4xxE	Rechargeable Li-Ion battery
CBHxxx	Belt clip
CAT90	High efficiency antenna
CSAHX	Rapid drop-in charger

OPTIONAL ACCESSORIES

Attaching and removing accessories

1. To attach an accessory, remove the accessory cover by unscrewing the locking screw anti-clockwise (store in a safe place).

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

3. To remove an accessory, unscrew the locking screw of the accessory by hand in an anti-clockwise direction. Ensure you re-fit the accessory socket cover so as to protect the socket.

BATTERY INFORMATION

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 status LED changes from red to green, a fully discharged battery pack will take approximately 2 hours (CNB420E), 3 hours (CNB450E) to re-charge.

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 the radio is turned off before placing it in the charger and never switch a radio on whilst in the charger.

- Only use Entel branded battery packs and chargers.

- 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.

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.

NAV KEY DISPLAY

1. On/Off/Volume control. Rotate clockwise to turn on and increase volume. Rotate anti-clockwise to reduce volume & turn off.
2. Group (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
   Amber steady - Booting up
   Amber / Red alternating - Not connected
   Amber flash every 5-seconds - Radio in standby
   Red steady - Transmitting
   Green steady - Receiving
   Amber rapid flash - In 1-2-1 call
   Amber double flash - Calling / being called
   Green rapid flash - Call hang time
   Red double flash - Low battery
   Red fast flash - Error
7. Info button
8. Navigation key
9. Microphone
10. Group (Channel) list*
11. User contact list*
12. Menu*
13. Call button*
14. End-call button*

* If enabled by your Dealer

Talk here

Full User Guide here: www.entel.co.uk/DN400_Full_User_Guide

PREPARING YOUR RADIO FOR USE
Attaching/removing the antenna

1. To attach, carefully align the antenna with the socket. Screw in the antenna and clockwise (taking care not to cross the thread) until it is seated firmly (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.

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, indicating the radio is ready for use.
4. Adjust the volume control (1) to select the desired volume level.
5. Using the Group (Channel) Control (2) ensure that you have the correct Group 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 of 'Switching On, Reception and Switching Off.'
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 PTT (Push To Talk) button (4) to begin your transmission. To confirm transmission the LED illuminates red.
5. For best transmitted speech quality you must talk directly into the radio's microphone (10) at around 4cm between your mouth and the radio.
6. Please note: with your mouth further away, you will transmit poor quality speech.
7. When the transmission is finished, release the PTT button.

EU DECLARATION OF CONFORMITY

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CE

DN radios behave differently compared to Entel's analogue and digital radios in that they have distinct start up modes.

a) **Cold Boot** – This is the start-up mode when the battery is first fitted or fitted again having been removed. The approximate time from switching ON to being ready for a first call is approx. **50 seconds**. The sequence of screens can be seen below in fig.1.

Fig.1 Cold Boot Screens

b) **Warm Boot** – This is the start-up mode when the battery is fitted and the unit has previously performed a full start-up (as 2a above) and been switched off again with the ON-OFF Volume control (1). The approximate time from switching ON to being ready for a first call is approx. **15 seconds**. The sequence of screens can be seen below in fig.2

Fig.2 Warm Boot Screens

There are other intermediate screens towards the end of the both the cold and warm boot sequences that may be seen.

Fig. 3 Intermediate connection screens

Note – When a unit has been switched OFF using the ON-OFF Volume control (1) and the battery is not removed, the unit remains in a low power standby state. Leaving a unit in this state will continue to drain the battery slowly.

c) Once the following screen is reached, the unit is connected and ready to make calls. (depending on how your DN is configured, some softkey options may not be available).
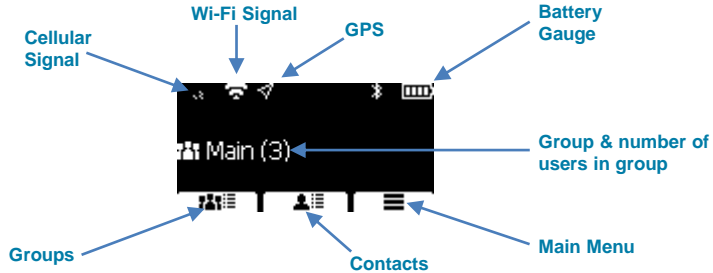
Wi-Fi Signal

GPS

Battery Gauge

Cellular Signal

Group & number of users in group

Groups

Contacts

Main Menu

Fig.4 Connected

3. Selecting a Group (Channel)

DN radios provide automatic access to a virtually un-limited number of 'channels' in the background. There is therefore no need for a channel control which instead becomes a Group selection control.

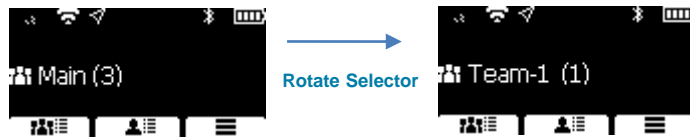Option A – Using the rotary Group Control (2) to select a group.

Rotate Selector

Fig.5 Changing Groups with Group Control

Option B – Using the Group list.

Open Groups

Choose Group

Press PTT side button
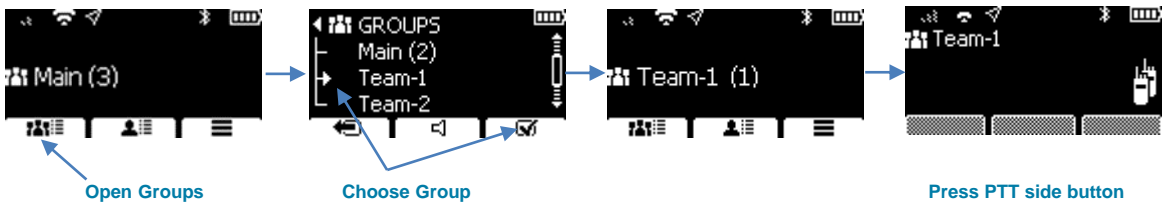
Fig.6 Changing Groups from the Group list

Option A – To speak to the selected Group (Standard Group Call) just press PTT.

Sending Radio

Press PTT   Release PTT

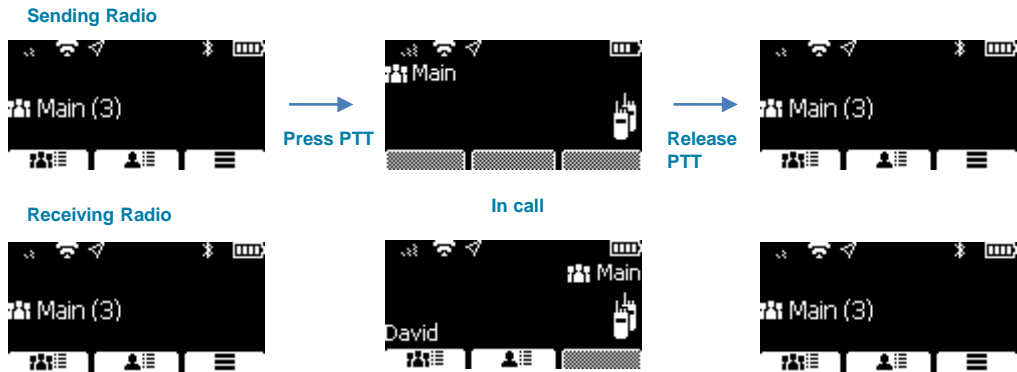**Receiving Radio**   **In call**

fig.7 Standard Group call

Option B – To make a Temporary Group call follow the sequence below (the radio will automatically revert to the selected Group after the call hang timer ends or you hang up the call using either the Softkey or Red button).
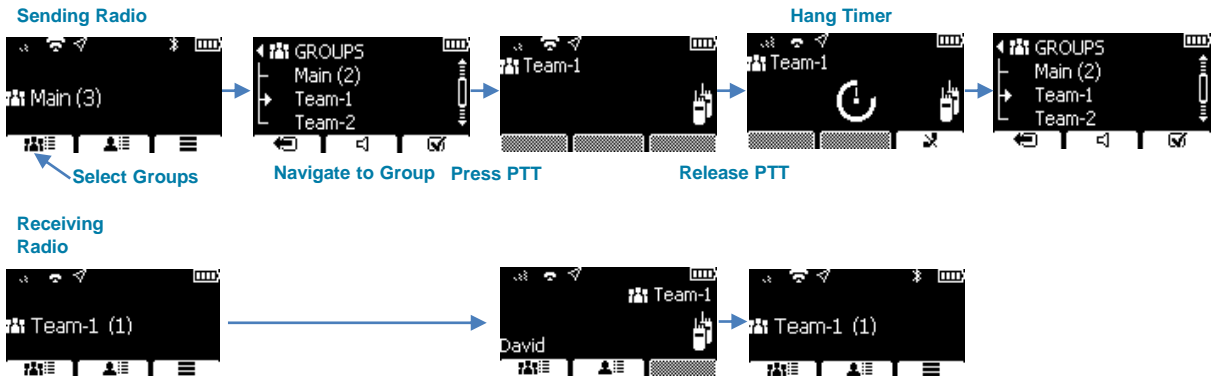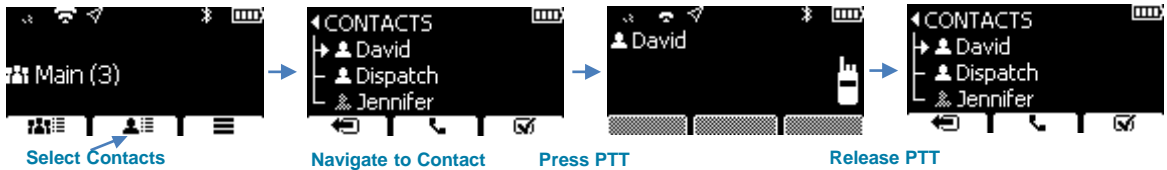
Sending Radio   **Hang Timer**

Select Groups   Navigate to Group   Press PTT   Release PTT

Receiving Radio

fig.8 Temporary Group call

5. Making / Receiving Individual calls

An individual call can be made in two ways, 'Impolite' – speak directly to the individual or 'Polite' – ring the individual and wait for an answer.

Option A – To impolitely call an individual, follow the sequence below. *Note: on-line contacts are indicated by a solid icon, offline contacts are greyed out and may not be called.*
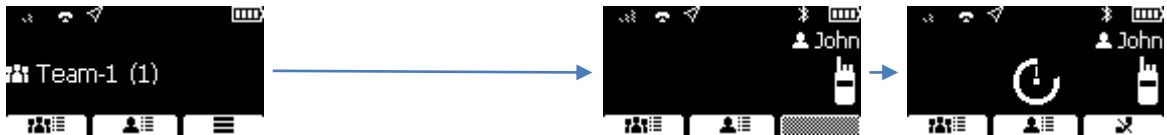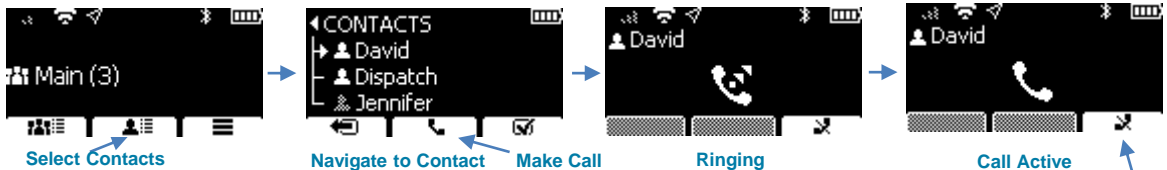
Sending Radio

Select Contacts   Navigate to Contact   Press PTT   Release PTT

Receiving Radio

Call Active   Hang Timer

fig.9 Impolite Individual call

Option B – To politely call an individual, follow the sequence below.

Sending Radio

Select Contacts   Navigate to Contact   Make Call   Ringing   Call Active

End Call

Receiving Radio

fig.10 Polite Individual call

The Green and Red buttons can be used to setup and end polite calls instead of the soft keys shown in Fig. 10

You may also temporarily set an Individual call as your default call to talk directly to an individual using PTT, follow the sequence below. To clear the individual from the display and revert to group calling rotate the group selector one click in either direction. A timer will also revert to the default Group address after 5-minutes of inactivity.
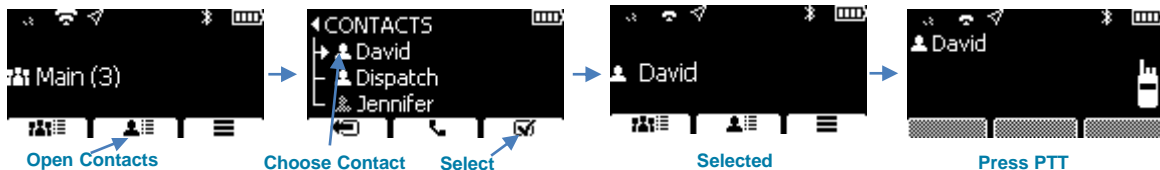

Open Contacts   Choose Contact   Select   Selected   Press PTT

fig.11 Individual PTT

DN is capable of updating its firmware and configuration 'over the air' (OTA).
- The OTA updates are pushed from Entel
- The user is able to select when to install the firmware update.

The OTA process follows two main steps.
1. When an OTA is available, on start-up (either a cold or warm boot) the following screen will be displayed.

If the tick is selected the OTA will progress according to the screens lower down, if the X is selected, the unit will proceed to the home screen as usual.

2. If the OTA is applied the following screens will be shown, the process will take several minutes to complete. Once finished, the unit will return to the usual home screen.

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)333 303 4492**   ✉ **sales@radiowavesuk.co.uk**   💻 **www.radiowavesuk.co.uk**