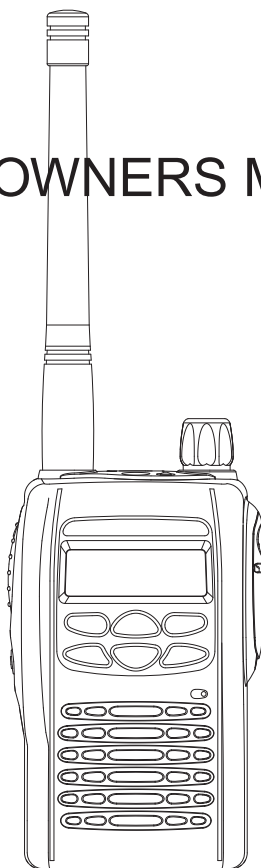


HX400 Series

VHF/UHF handheld transceivers

OWNERS MANUAL



Entel UK

CE COMPLIANCE STATEMENT

The HX400 series transceiver displays "CE" on the serial number label, indicating its compliance with the essential requirements of the EEC directive for Electromagnetic Compatibility.

DECLARATION OF CONFORMITY

We Entel UK Limited,

OF:

3rd Floor, Ridgehill House, Elstree Way
Borehamwood, Herts
WD6 1JL
United Kingdom

Declare under our sole responsibility that the product:-
HX400 VHF/UHF handheld transceiver

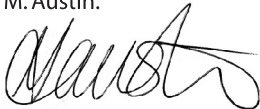
Serial Number

To which this declaration relates, is in accordance with directive 95/5/EC and conforms to the following standard or other nominative documents:-

EN 300 086-2 V1.1.1, EN 301 489-1 V1.5.1:2003, EN 60065:2002

Following provisions of the R&TTE directive.

M. Austin.



Quality Manager



TABLE OF CONTENTS

1.1 GENERAL FEATURES	3
1.2 PACKING LIST	3
1.3 OPTIONAL ACCESSORIES	4
1.4 CONTROLS AND INDICATORS	7
1.5 LCD INDICATORS	9
1.6 RECEPTION	10
1.7 TRANSMISSION	10

1.1 GENERAL FEATURES

1. Ultra compact size & design
2. Heavy-duty, durable construction
3. 256 PC programmable channels
4. Programmable buttons
5. 2/5 tone selcall
6. Lone worker
7. Phonebook
8. Missed call
9. Scan modes
10. Stun & unstun feature
11. IP-55 construction
12. VOX with auto sensing
13. Built in scrambler
14. Emergency call
15. Battery level indicator
16. Low battery warning bleep
17. DTMF
18. Lithium-Ion battery technology
19. Password access
20. Extensive range of accessories

1.2 PACKING LIST

The supplied package:

- HX400 Transceiver
- CNB400E Rechargeable lithium-Ion battery pack
- CBH400 Spring loaded rear clip
- High efficiency antenna
- Owners manual

1.3 OPTIONAL ACCESSORIES

The HX400 Series is supported by a wide range of useful accessories. For an up to date list visit our web site at www.entel.co.uk

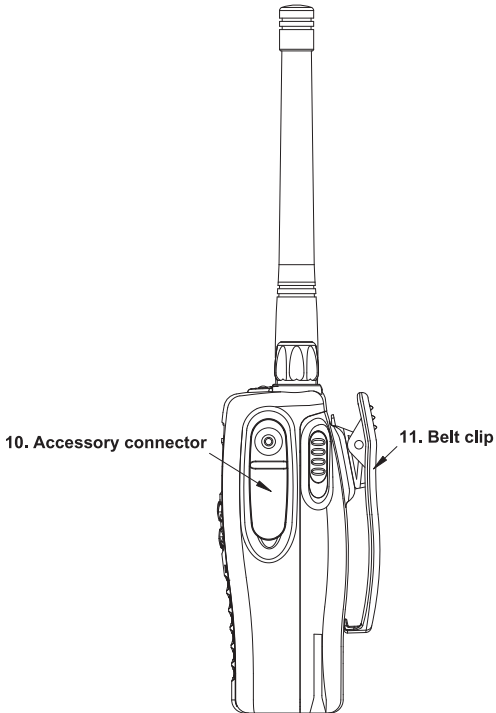
CSA400E	Single pod rapid charger, 110/230v operation
CSB400E	Six pod rapid charger, 110/230v operation
CMC400E	12v trickle charger
CST640E	3 or 6 pod battery conditioner/analyser
CNB400E	7.4V 1800mAh rechargeable lithium-Ion battery pack
CMP1/400	Small compact speaker microphone with earpiece jack
CMP400E	Submersible, noise cancelling speaker microphone (heavy duty)
EA19/400	Earpiece microphone with dual PTT button (vox)
EA15/400	Covert style ear/microphone with transparent acoustic tube
MSP01/400	Crash helmet earpiece microphone with PTT
CHP1/400	Light weight single earpiece headset with PTT (vox)
CHP400HS	Heavy-duty single ear defender for hardhat with PTT (vox)
CHP400HD	Heavy-duty double ear defender for hardhat with PTT (vox)
CHP640D	Heavy-duty double ear defender with headband and PTT (vox)
CXR5/400	Skull microphone (vox)
CXR16/400	Throat microphone (vox)
EHP400	Covert style earpiece
CFC400	Soft leather pouch with carry strap
CLC400	Heavy duty leather case with belt loop & carry strap
CXW640	Antenna adaptor for external aerial connection
CAT400VS	Stubby antenna VHF
CAT400US	Stubby antenna UHF
CAT400L	Flexible antenna VHF low band
CBH400	Spring loaded rear clip
CXW591	External aerial adaptor

**Accessories suitable for vox operation have been marked (vox)

1.3.1 Attaching audio accessories

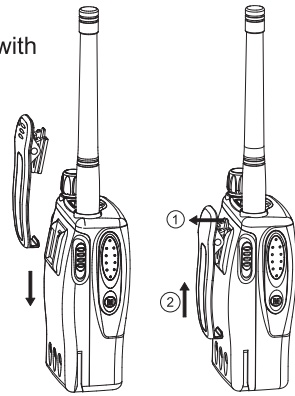
Locate accessory connector cover on the right hand side of the radio. Lift the cover and rotate (screw clockwise) the connector as shown in the diagram below.

IMPORTANT: When not using audio accessories, keep the accessory jack cover firmly pressed in its recess. This will prevent the accessory connectors from becoming rusty.



Preparation prior to use

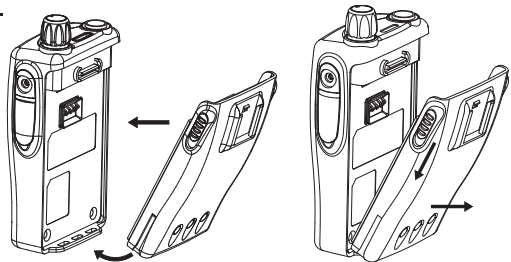
- 1. Attaching the belt clip;** Align the belt clip with the plastic slots of the battery pack. Slide the belt clip downwards onto the battery pack, pushing firmly until a click is heard.



- 2. Attaching the battery pack;** ensure the transceiver is switched off.

Place the battery pack against the back of the transceiver so that the three tabs on the bottom of the battery engage in the three openings on the transceiver.

Then press the battery against the radio until you hear a click.



- 3. Attaching aerial;** Carefully align the aerial with the aerial socket, which is located on the left hand side of the transceiver. Rotate the antenna clockwise until it is seated firmly against the transceivers top escutcheon.

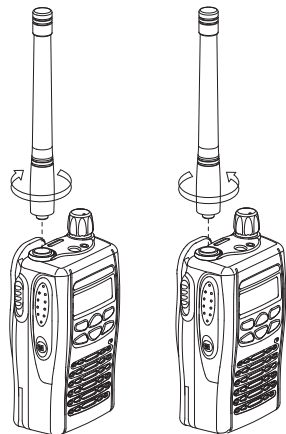
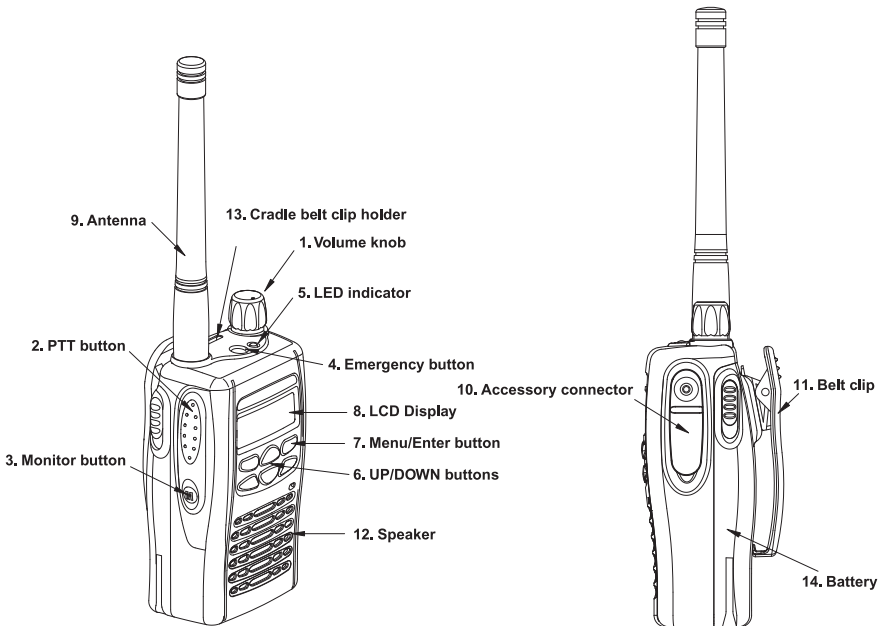


Figure 2. Controls and Connectors

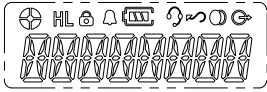


1.4 CONTROLS AND INDICATORS

- 1) POWER SWITCH/VOLUME CONTROL
Powers the transceiver on and off.
- 2) PUSH TO TALK SWITCH
Hold down to transmit, release to receive.
- 3) MONITOR button
Dealer programmable
- 4) EMERGENCY button
Dealer programmable
- 5) LED indicator

- 6) UP/DOWN buttons
Dealer programmable
- 7) MENU/ENTER button ✓
Dealer programmable
- 8) LCD DISPLAY
- 9) ANTENNA
- 10) ACCESSORY CONNECTOR
To connect HX400 to an Entel approved audio accessory.
- 11) BELT CLIP
- 12) SPEAKER
- 13) CRADLE FOR BELT CLIP HOLDER
Carrying accessory
- 14) BATTERY PACK
Rechargeable lithium-Ion battery pack provides DC power source to the transceiver.

1.5 LCD INDICATORS



CHANNEL DISPLAY

The operating channel.



Indicates relative signal strength



Appears when beep sound is turned on.



H indicates high power L indicates low power



Appears when scan is activated

TX Indicator

Indicates transmission in progress



Voice operated mode enabled



Scrambler mode enabled



The keypad is locked, with the exception of the PTT, H/L and LAMP buttons.

BATTERY LIFE INDICATOR

The lithium-Ion battery of your transceiver is continually monitored for your convenience and safety.



Talk around indicator

OPERATION

1.6 RECEPTION

1. Turn the transceiver on by rotating the control in a clockwise direction. A power on tone is generated after 1 second to indicate the transceiver has passed its self-diagnostic test. Select the desired audio level by further rotating the control clockwise. After power on, the transceiver will always default to the last channel selected.

2. Select the desired channel using the UP/DOWN buttons.

3. When receiving a signal the LED indicator illuminates green

1.7 TRANSMISSION

1. Perform steps 1 through 3 of RECEPTION.

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 transceiver cannot transmit and receive simultaneously.

4. Press the PTT (push-to-talk) switch to begin your transmission. To confirm transmission in progress the LED illuminates RED.

5. Holding the transceiver 1 inch from your mouth speak slowly and clearly into the microphone.

6. When the transmission is finished, release the PTT switch.

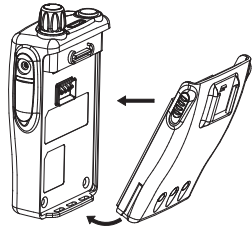
Additional features

The HX400 Series incorporates some very advanced and unique features that can be of positive benefit to your organisation. These features can be set-up and accessed in a number of different ways using any one of the programmable buttons. Please contact your dealer to discuss your exact requirements.

BATTERY REMOVAL/INSTALLATION

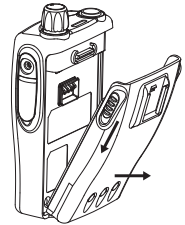
Attaching the battery:

1. Ensure the transceiver is switched off.
Place the battery pack against the back of the transceiver so that the three tabs on the bottom of the battery engage in the three openings on the transceiver. Then press the battery against the radio until you hear a click,



Removing the battery:

1. Turn the transceiver off.
2. Slide the battery latches, on both sides of the battery downwards.
3. Pull the top part of the battery away from the radio's body, and remove the battery pack.



3.1 BATTERY INDICATOR

For your safety and convenience the HX400 continually monitors the battery pack and gives an indication on the LCD:

3.2 BATTERY SAFETY

The battery pack of your transceiver contains lithium-Ion cells. This type of battery stores a charge powerful enough to be dangerous if misused or abused, especially when removed from the transceiver. Please observe the following precautions:

DO NOT SHORT BATTERY PACK TERMINALS

Shorting the terminals that power the transceiver can cause sparks, severe over heating, burns, and battery cell damage. If the short is of sufficient duration, it is possible to melt the battery components. Do not place a loose battery pack on or near a metal surface or objects such as paper clips, keys, tools etc. When the battery pack is installed on the transceiver, the terminals that transfer current to the transceiver are not exposed. The terminals that are exposed on the battery pack when it is mounted on the transceiver are charging terminals only and do not constitute a hazard.

DO NOT INCINERATE

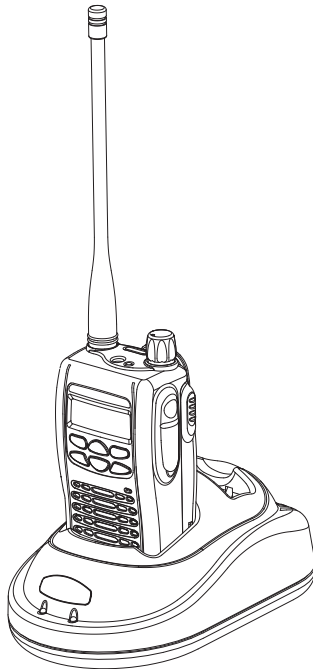
Do not dispose of your CNB640 battery in a fire or incinerator. The heat of fire may cause battery cells to explode and/or release dangerous gases.

DISPOSE OF BATTERY PACKS PROPERLY

Lithium-Ion battery packs must be recycled or disposed of properly. For requirements in your area, check with the dealer from whom you purchased your transceiver.

Optional rapid charger - model CSA400E

1. Connect the CSA400E to a mains supply (110-230v) When switching on the LED's will flash momentarily.
2. Turn the transceiver off and with the battery pack attached insert the transceiver in the front pocket. The LED will illuminate red to indicate charging in progress.
3. An extra battery can be charged in the additional rear slot but will not start charging until the front pocket charge is complete.
4. Charge time for a fully discharged battery will take up to 2 hours 30 minutes. On completion the LED turns green.



<Intended Country of Use>

GER

NED

ITA

AUT

BEL

GRE

GBR

LUX

SWE

IRL

ESP

DEN

FRA

POR

FIN

CE0891 

Copyright and Unregistered Design Right Entel UK 2004
All right reserved

Copy right Entel UK Ltd, London