

Business  
Critical  
Communications

Entel

# DX485U-CB-ANZ

Commercial Grade UHF CB/DMR Portable Radio for ANZ



Advanced engineering for crystal clear audio



Submersible IP68



Secure communication



Ultra compact



**Digital** | CRYSTAL  
CLEAR  
AUDIO

**Migration  
Simplified**



Actual size

# Entel DX485U-CB-ANZ

## UHF CB and Digital DMR Portable Radio

ANZ's only ultra-compact, lightweight and dual-mode (Analogue UHF CB and Digital DMR) radio. This rugged and fully submersible DX485U-CB-ANZ radio deploys the latest DMR digital technology combined with Entel's audio tailoring technology to ensure the best possible range and clarity.

Whether you need a basic entry level radio, advanced digital features, or something in between, the DX485U-CB ANZ radio delivers smart solutions, helping you to increase productivity and to keep your business connected. The DX485U-CB-ANZ is supplied licensed and type approved for use on the ANZ UHF CB platform, programmed with the 80 UHF CB channels. The DX485U-CB-ANZ radio has the further capacity of an additional 163 programmable channels in either analogue or DMR configurations.

By combining innovative technology unique to Entel, with the globally accepted DMR standard and a robust IP68 submersible enclosure, Entel, in collaboration with Ace, has produced the most exciting ANZ UHF CB and DMR radio on the market today. Ace and Entel's DX485U-CB-ANZ radio delivers the best-in-class performance, range and clarity.

## Why digital?

- Better coverage
- Significantly louder and clearer audio
- Longer battery life, longer duty cycles
- Far superior privacy

**DMR is split into three types of service, from short-range license free to National/International connected networks. The DX485U-CB-ANZ Radio utilizes Tier II:**

**Tier I** - For commercial and leisure use with direct mode operation (no repeaters allowed). Fully approved for use within Europe and no license is required.

**Tier II** - For small to medium size licensed systems. Radios can be used in direct mode or with a repeater if significantly extended range is required. Tier 2 repeaters can be networked to increase the coverage area even further.

**Tier III** - For medium to large size licensed systems. 'Trunked' repeaters are used giving automatic access to multiple channels which may be extended and networked to support very large numbers of radios or coverage areas.

## Double the Channels

Using two slot simplex, Entel's DX485U-CB-ANZ radio splits each channel in two, delivering double the number of digital channels at no extra cost. For example, if you are using a single analogue channel, the same channel in digital mode will yield two channels.



DX485U-CB ANZ

## Simple to Sophisticated

### DX485U-CB-ANZ

As per the entry model, plus a high contrast white on black OLED display, navigation button, menus and an extensive contact list. This allows a larger number of individual radio users and groups to be called, and even multiple groups at once. The mid-tier model is also capable of displaying emergency caller ID and free format text messages as well as sending pre-formatted text messages.

Designed in the United Kingdom

# Key Benefits

## IP68 Submersible

The DX Series can withstand total immersion in water to a depth of 2 meters for 4 hours, more than a match for the hazards likely to be encountered in any field of operation.

## High Contrast OLED

Entel's high contrast white on black OLED display provides exceptional readability at all angles both indoors and out.

## Powerful Package

Compact, versatile and powerful, Entel's DX485U Series radio offers best-in-class performance, with an impressive 2 watts of natural-sounding digital audio, exceeding the output of radios almost twice their size. In addition, all of the DX Series' range of audio accessories benefit from Entel's unique speech optimisation technology.

## Entel Sure Speech™

Entel intelligent speech tailoring technology optimises audio, delivering the very best clarity, volume and natural sound.

## Migrate Your Way

Entel's DX485U radio offers both analogue and digital modes offering a migration path from existing analogue radio systems.

For advice specific to your needs, please contact your Ace Partner.

The DX485U-CB-ANZ Series has been future-proofed with new features supplied as free software upgrades.

## Exceptionally Robust

Entel's development team recognise that durability and reliability go hand-in-hand. To meet the requirements of the most demanding users, the DX Series is tested to MIL-STD-810 C, D, E, F and G for temperature, thermal shock, pressure, vibration, impact shock, solar radiation and rain and dust ingress. Entel's rigorous life-cycle testing ensures users can expect many years of trouble-free use.

## High-Grade Accessory Interface

The rugged, multi-pin interface and Micro-USB socket are both submersible and gold-plated to minimise any risk of damage or corrosion. All Entel's accessories incorporate a robust locking plug and high-grade cable.

## Enhanced Privacy

Entel's digital speech is more difficult to monitor than analogue radio. To further secure your communications system, it is possible to use the DX485U's built-in secure digital encryption feature.

## Simple End-User Programmer App

With Entel's unique user-friendly app there is no longer any need for a dealer to visit on site (or have the radios returned) to re-program or update customers' radios. Using Entel's free PC app, anyone can simply transfer programming data, software updates or add new features to their DX radios:

**Step 1.** The dealer emails the app and a 'Fleet File' to his customer.

**Step 2.** The customer runs the app and then drags and drops the 'Fleet File' into the app.

**Step 3.** The customer connects the radios to the PC (via a standard Micro-USB lead) and the semi-automated wizard programmer app takes care of everything else.

Please ask your Ace Dealer for a free, no obligation trial.

# Key Features

- ✓ Compact, rugged
- ✓ IP68 submersible
- ✓ Digital and analogue modes
- ✓ Superior battery endurance
- ✓ 2 watts of audio, loudest in class
- ✓ Intelligent audio technology
- ✓ Audio accessory optimisation
- ✓ Extensive contact list (display models)
- ✓ Bluetooth V4.0, Class 2 (optional)
- ✓ Enhanced privacy as standard
- ✓ Simple end-user programmer app
- ✓ Outstanding range performance
- ✓ High contrast white on black OLED display
- ✓ Two-slot simplex operation
- ✓ Software upgradable for extra features / updates
- ✓ Greater data capability

# Technical Specification

Specification	
Channel Capacity	DX485U-CB ANZ – 80 UHF CB and 165 channels / 8 zones
Analogue Channel Spacing	25 KHz / 12.5 KHz
Digital Channel Spacing	12.5 KHz
Vocoder	AMBE+2
Operating Voltage	7.6V
Battery	CNB420E 1350mAh Lithium-Ion CNB450E 2000mAh Lithium-Ion
Weight (with battery)	243g with CNB420E 267g with CNB450E
Overall Dimensions (HxWxD)	97mm x 59.5mm x 33mm (with CNB420E) 97mm x 59.5mm x 37mm (with CNB450E)
Frequency Stability	1.5ppm
Antenna Impedance	50 ohm
Operating Temperature	-20 to +55°C
Dust and Liquid Intrusion	IP68 2 metres for 4 hours
Drop Test	MIL-STD 810 C/D/E/F/G Standard
Packing Test	MIL-STD 810 C/D/E/F/G Standard
Vibration and Shock	MIL-STD 810 C/D/E/F/G Standard
Approvals	Analogue mode RF EN 300 086 v2.1.2 Digital mode RF 300 113 v2.2.1 EMC EN 301 489-1 v2.2.0 & EN301 489-5 v2.2.0 Safety (LVD) EN 60950:2006, A1, A11, A12 & A2 SAR EN 50566:2017, EN 62311:2008 & EN 62209-2:2010 ASNZS 4295; ASNZS 4265
Air Interface (DMR)	ETSI TS 102 361

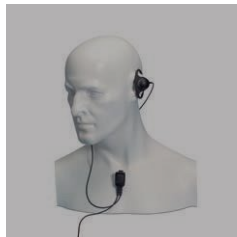
Frequency Band	
450-520MHz	DX485U-CB ANZ
Transmitter	
Power Output (HI/LOW)	4W/1W
Modulation Type	7K60FXE / 7K60FXD, 8K0F3E, 16K0F3E
Distortion	2%/5% digital/analogue
Unwanted Emission	0.25uW/1.0uW <1GHz/>1GHz
Adjacent Channel Power	-60dBc
Receiver	
Digital Sensitivity	Typically -121dBm (0.2uV) for 5% BER
Analogue Sensitivity	Typically -121dBm (0.2uV) for 12dB Sinad
Rated Audio Output	2 watts
Intermodulation	-42dBm
Adjacent Channel Selectivity	60dB (Digital) 60/70 (Analogue 12.5/25KHz)
Spurious Response Rejection	-37dBm
Spurious Radiations	2.0nW/20nW <1GHz/>1GHz

## Accessories

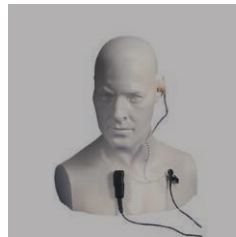
Supplied package includes: Li-Ion battery pack, rapid drop-in charger, belt clip, high-efficiency antenna and quick-start user guide.



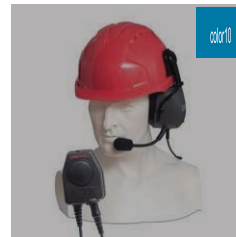
**CSBHX**  
Six-way charger



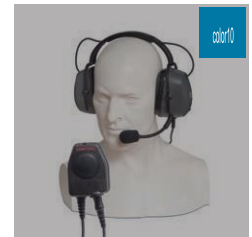
**EA12/DX**  
Earpiece microphone



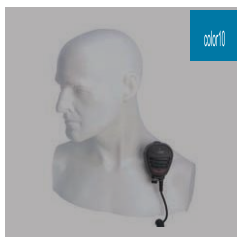
**EA15/DX**  
Covert earpiece microphone



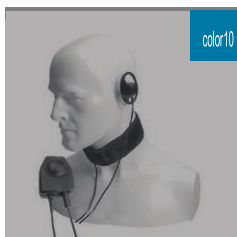
**CHP450HS/DX\***  
Hard hat ear defender submersible PTT



**CHP450D/DX\***  
Headband ear defender submersible PTT



**CMP/DX**  
Submersible heavy-duty speaker microphone



**CXR16/DX\***  
Bone conductive throat mic, submersible PTT



**CXE19/DX**  
Submersible bone conductive skull mic



Submersible products are represented with a water droplet.

For the complete range of accessories please visit our website. All specifications are subject to change without notice.

\* Submersible - PTT only

## Contact

For more information about this product, please contact:  
Skywave communications, 51 Sandy Camp Rd, Wynnum QLD 4178.

☎ (07) 3393 5064

✉ [sales@skywavecommunications.com.au](mailto:sales@skywavecommunications.com.au)

🌐 [skywavecommunications4u.com.au](http://skywavecommunications4u.com.au)

