

A new generation of marine communication and safety. Integrated VHF and AIS with seamless mobile device CONNECT-X command-mic and safety connectivity. Built and engineered for the mariners who demand the best.



convenient.

X100 defines a new horizon

### **ENGINEERED & BUILT FOR BOATING LIFE**

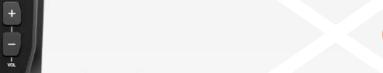
- Ruggedized, water and weather-proof
- CLEAR-WAVE digital audio processing
- Full colour direct-sunlight visible display

Base

X100 I

- WiFi & Bluetooth
- NMEA2000 & 0183
- Integrated GPS (external antenna optional)
- Integrated zero-loss VHF antenna splitter - only one antenna required for both AIS and VHF
- Ergonomic intuitive controls and UI
- Flush, desk top, ceiling mounting options

X100 VHF | DSC | AIS















### OUTSTANDING **FUNCTIONALITIES THAT ENHANCE YOUR BOATING**

- CONNECT-X Transform your smart phone or smart watch into a full feature wireless command mic. You can use to make and receive calls, monitor VHF/DSC, AIS traffic and nav alerts anywhere on your boat.
- VHF/DSC X100 is a certified Class DVHF/DSC marine radio with a full feature globally certified Class D VHF/ DSC radio.
- Chat to anyone on the boat using the Connect-X private intercom functionality.
- Enable MOB function and be alerted. to any connected device that leaves the boat.
- High powered AIS that receives and transmits. Integrated navigation alerts and even allows you to go silent and stop transmitting when you want.

- Single system wide phonebook for Vessel DSC, AIS & On-board Intercom for consistent communication by whatever means vessel-wide.
- Wi-Fi Access Point mode for installation standalone, or Station mode for integration within existing vessel Wi-Fi infrastructure for a scalable solution that will meet the needs of solo mariners on small boats to medium to large Motor Yachts and Sailing vessels.
- Streaming of all received AIS data to navigation apps on tablets and phones over Wi-Fi to easily integrate 3rd party navigation apps into your system.
- Autoset DSC "Nature of Distress" when in a MOB situation for quicker triggering of DSC distress following a MOB situation.
- Initiation of DSC calling from: Phonebook, AIS List/Plot or via direct entry of MMSI to make using DSC much more convenient, quicker and feature rich without having to enter MMSI numbers directly.

# Advanced features for enhanced safety and communication

### VHF/DSC

Full feature Class D VHF/ DSC radio with advanced Clearwave digital audio processing.



Wireless Command-Mic

your wrist. Use your smart phone or watch as a full feature wireless radio command-mic.



Connect multiple mobile

devices. MOB and

instructions.

PLB alerts with locate

MOB

# AIS

AIS Class B. Show all targets, transmit own position, ID vessels, CPA alerts.



# One Touch Calling

Select any DSC or AIS target and make a direct DSC/VHF call. DSC you can easily use.







# Private Intercom

Connect multiple phones and watches and talk privately to each other or group call.









# H



# UNIQUE FEATURES

- Watch: Dual | Tri | Custom Tri if you need to listen to two channels, whilst monitoring channel 16.
- Common controls on Fist Mic:
  Volume, Channel, Hi/Lo, Dedicated
  Ch. 16 for single handed operation.
- Quick channels for immediate access to commonly used channels.
- 2 way crew Intercom for integrated, private, communication with crew without transmitting VHF.
- Public Address for boat-wide communication with passengers and crew.

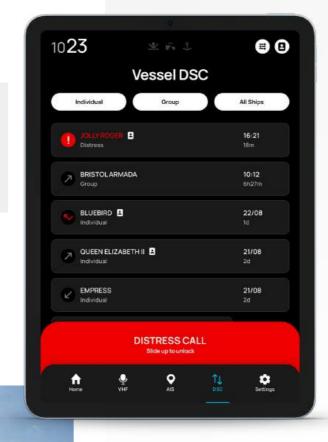
- Scan: All | Custom | All + 16 |
  Custom + 16: Quickly scan only the channels you need for efficient monitoring.
- Access to registered, countryspecific, private & marina channels:
   Stay compliant and access local radio channels wherever you are.
- USA, Canada, International and ATIS channel mappings:
   Automatically align with the correct channel settings based on your region, ensuring legal and effective communication.
- Loudhailer: Communicate directly with nearby vessels that aren't responding to VHF calls.



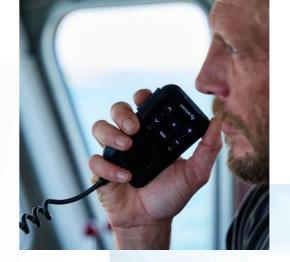


# UNIQUE FEATURES

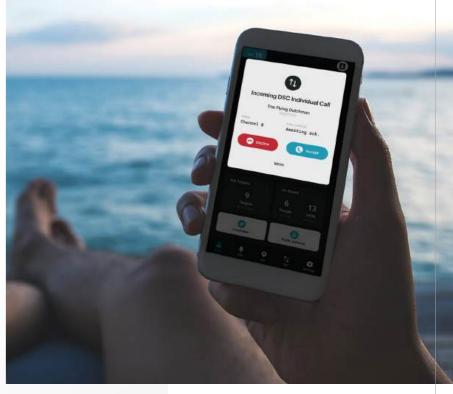
- NMEA2000 integration for generation / monitoring of DSC messages from MFD to allow the MFD to initiate outbound DSC messages.
- Quick Calling for single button calling of AIS targets.
- Individual Routine Call: One-to-one communication with other vessels without using channels predominantly used for emergencies and urgent communications.
- Safety Call: Make and receive safety-related announcements to alert nearby vessels of potential hazards.







- Urgency Call: Make and receive Pan-Pan calls for urgent, but non-lifethreatening situations.
- Distress Call: Send and receive Mayday calls in emergencies for immediate assistance.
- Test Call: Verify DSC functionality without initiating a real call, ensuring communication reliability.
- Group Call: One-to-many DSC communication for events like races, simplifying coordination among multiple vessels.

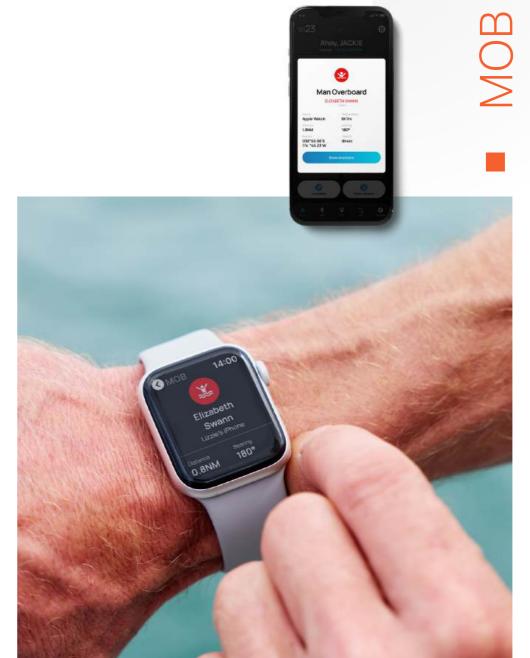




■ **High power Class B** – See and be seen further away to maximize safety.

- Intelligent scheduling around VHF transmission such that VHF voice doesn't interfere with AIS and vice versa.
- Single VHF Antenna connection for both AIS and VHF Voice/DSC for simple installation.
- Silent mode with timer to allow you to set a period during which silent mode is active.

Display of Vessels, SAR Aircraft & SART: Comprehensive situational awareness to maximize communication opportunities.



## UNIQUE FEATURES

- Embarkation and Disembarkation of devices to allow you to easily configure MOB when setting sail and returning to port.
- Automatic enrolment of supported devices to simplify the process of adding new devices.
- Adjustable sensitivity of loss of MOB devices to minimise false positives.
- Output of NMEA2000 MOB message type to MFD for display of MOB markers on chart plotters.
- Scalable across entire vessel: Can integrate with your vessel's Wi-Fi to eliminate communication dead spots, ensuring full coverage.
- Only critical events shown: Clear, graphical information aids in prompt and effective MOB recovery.

# CONNECT-X turns your phone into a radio command mic





With the powerful yet free CONNECT-X app, you can wirelessly connect up to 10 mobile devices and turn them into full-function mobile radio command mics allowing you to manage communication, navigation and emergency functions from anywhere onboard.













- Respond immediately to emergencies with instant MOB alerts and recovery locations, as well as CPA, anchor drift and inbound DSC messages.
- Maintain full control over VHF communications from any location on the vessel.
- Privately intercom crew and PA throughout the vessel and loudhail other vessels nearby.



# Physical specification – base unit

Dimensions	W249mm, H84mm, D162mm
Weight	700-800g

## General

RF Frequency range TX	156.025-161.425 MHz
RX	156.300-161.925 MHz
DSC	156.525 MHz
AIS 1,2	161.975, 162.025 MHz
Usable channels	INT, USA, CAN, ATIS

### Electrical

Power supply	9.6-31.2 V DC
Operating temperature range	-25°C to +68°C
Antenna impedance	50 Ω
Transmitter output power	VHF: 25W, 1W AIS: 5W

## Audio

Audio output power – internal speaker	5W producing 81 dB @ 1m
External speaker / loudhailer	15W

# Connectivity

NMEA 0183 / NMEA 2000	Ed 3.101
Wireless LAN standards	IEEE802.11 b/g/n
Authentication and encryption	WEP (64/128 bit), WPA- PSK (TKIP), WPA2-PSK (AES)
Bluetooth	4.2 classic and low energy (BLE)

# Certifications

AIS class B SOTDMA	IEC 62287-2:2017
DSC/VHF	EN 301025 v2.2.1 & IEC 62238
NMEA	IEC 61162-1 & IEC 61162-3
Environmental	IEC 60945 "Exposed" + IEC 60529 IP66



# Get yours now

# em-trak.com



#### em-trak United Kingdom

em-trak Marine Electronics Limited Wireless House Westfield Industrial Estate Midsomer Norton Bath, BA3 4BS UK

T +44 (0)1761 409 559 F +44 (0)1761 410 093 E enquiries@em-trak.com

#### em-trak United States

em-trak Marine Electronics Limited 470 Atlantic Avenue, 4th Floor Boston, 02210 USA

E enquiries@em-trak.com

Dealer stamp:

