



# VXA-220

AIR BAND TRANSCEIVER

## ProVI

**Submersible**  
**IPX7 (3 feet/1 m for 30 mins)**

**Loud Audio**  
**(700 mW)**

- 5 Watts TX Output Power (at 7.2 V. 5 W P.E.P. typ., 1.5 W carrier)
- Loud Audio (700 mW)
- 250 Memory Channels (Incl. Pre-Programmed Book Memory Channels)
- 8 Character Alpha Numeric Display
- Back-lit Keypad and Display with Dimmer
- One Touch Emergency Frequency (121.5 MHz) Access
- Rugged and Submersible Construction (3 feet/1 m for 30 minutes)
- NOAA Weather Channel Receive (U.S.A. Only)
- NOAA Weather Alert (U.S.A. Only)
- RX Battery Saver
- VOX Operation (Voice-actuated Transmit/Receive switching)
- PC Programmable



Actual Size

 **Vertex Standard**

## Rugged and Submersible Construction (3 feet/1 m for 30 minutes)

The VXA-220 is built inside a rugged Aluminium case, carefully sealed to protect against water ingress. Built to survive immersion in water for up to 30 minutes at a depth of three feet, VXA-220 can keep you communicating even if it gets wet due to severe weather or unforeseen water landings.

## Loud Audio (700 mW)

Ideal for reception in noisy environments, high-powered audio of the VXA-220 is coupled to a large internal speaker, assuring solid copy throughout difficult and noisy conditions.

## 5 Watts TX Output Power (at 7.2 V. 5 W P.E.P. typ., 1.5 W carrier)

For reliable communications over difficult communications paths, the VXA-220 provides 5 Watts (PEP) of transmitter power (1.5 W carrier). With its excellent audio clarity, the VXA-220's transmitter will get your message through.

## 250 Memory Channels (Incl. Pre-Programmed Book Memory Channels)

The 150 regular memory channels and 100 pre-programmed "Book" memory channels can store just about any commonly-used operating frequencies that you choose. The memories may also be labeled with an Alpha-numeric title of up to 8 characters, for easy recognition.

## 8 Character Alpha Numeric Display

Providing an Alphanumeric Channel Label of up to 8 characters, the LCD display also provides convenient operating function icons to provide instant recognition of radio statuses.

**SUPPLIED ACCESSORIES:** • Ni-MH Battery Pack (7.2V, 1400mAh) **FNB-83** • Overnight Charger **NC-88B/C\***

• Charger Cradle **CD-32** • Helical Antenna **ATV-10** • Headset Cable **CT-96**

## ACCESSORIES & AVAILABLE OPTIONS

 <b>MH-44a4b</b> Speaker Microphone	 <b>FBA-25A</b> Alkaline Battery Case	 <b>VAC-10</b> Desktop Charger	 <b>E-DC-5B</b> DC Cable w/Noise Filter	 <b>E-DC-6</b> DC Cable: plug and wire only	 <b>CN-3</b> Antenna Adapter (SMA to BNC)
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\*"B" suffix is for use with 120 VAC or "C" suffix is for use with 230-240 VAC.

About this brochure: We have made this brochure as comprehensive and factual as possible. We reserve the right, however, to make changes at any time in equipment, optional accessories, specifications, model numbers, and availability. Precise frequency range may be different in some countries. Some accessories shown herein may not be available in some countries. Some information may have been updated since the time of printing; please check with your Authorized Vertex Standard Dealer for complete details.



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<http://www.vxstd.com>

## Back-lit Keypad and Display with Dimmer

For quick access to operating frequencies, simply enter the frequency information directly from the 17 button keypad, then press the "Push To Talk" (PTT) button to transmit. There is no need to store frequencies in memory before operating.



## NOAA Weather Channel Receive (U.S.A. Only)

The VXA-220 can receive all 10 NOAA weather broadcast frequencies. The Automatic Active Weather Channel Locator (a Vertex Standard exclusive) automatically scans for active NOAA weather stations in your area when WX band is selected.

## NOAA Weather Alert (U.S.A. Only)

The VXA-220 includes a special feature that sounds an alarm when the special "Severe Weather" alert tone is received from a Weather Broadcast station. This warns you of potentially hazardous flying conditions.

## RX Battery Saver

This feature is designed to maximize the life of the transceiver's battery. When the VXA-220 is in the standby mode the battery saver de-energizes the transceiver's circuitry, waking it up at user-selected intervals to sample for radio activity. If no activity is detected the Pilot goes back into its sleep mode. Current consumption is minimized, thereby maximizing battery life. This feature is only found on Vertex Standard Airband transceivers.

## One Touch Emergency Frequency (121.5 MHz) Access

For lightning-fast access to the 121.5 MHz Emergency Frequency, a dedicated key on the front panel assures you of no delays in summoning help in an emergency.

## 3-WAY DISPLAY TITLING AND BACK-LIT DISPLAY

Easy to use, versatile access to channel information is critical to successful transceiver operation. Only Vertex Standard Airband transceivers offer you one-keystroke access to three different methods of displaying memory channel information: Frequency, Channel Number, or Alpha-Numeric title.

Frequency	Channel Number	8 Character Alpha Numeric
M 118.500	CH-001	TOWER-01

## OTHER FEATURES

• VOX Operation (Voice Activated Transmit/Receive switching) • Automatic Noise Limiter • One-Touch Squelch (Monitor) Control • External DC Jack (12V) • 8.33 or 25 kHz Channel Steps • Stop Watch and Count Down Timers • Easy-to-use Menu System for Custom Configuration • PC Programmable (Requires programming cable CT-29+CT-97 and software CE88)

## SPECIFICATIONS

### General

Frequency range: TX: 118.000 - 136.975 MHz  
RX: 108.000 - 136.975 MHz,  
Weather Channels (WX-01 - WX-10: USA version only)  
Channel Spacing: 25 kHz / 8.33 kHz (RX only)  
Emission Type: TX: AM;  
RX: AM & FM (FM: for receiving the Weather Channels, USA version only)  
Supply Voltage: 6.0-15.0 V DC  
Current Consumption: 250  $\mu$ A (power off), 35 mA (battery saver on, saver ratio 1:5), 60 mA (squelch on), 200 mA (receive), 850 mA (transmit 1.5 W Carrier)  
Temperature Range: +14° F to +140° F (-10° C to +60° C)  
Case Size (WxHxD): 2.36" x 4.09" x 1.2" (60 x 104 x 30.5 mm) w/o knob & antenna  
Weight (approx.): 12.7 oz (360 g) with FNB-83, antenna, and belt clip

### Receiver

Circuit Type: Double-conversion Superheterodyne  
IFs: 47.25 MHz & 450 kHz  
Sensitivity: AM: Better than 0.8  $\mu$ V  
(for 6 dB S/N with 1 kHz, 30 % modulation)  
FM: Better than 0.4  $\mu$ V (for 12 dB SINAD)  
Selectivity: More than 8 kHz/-6 dB  
Adjacent CH. Selectivity: Less than 25 kHz/-60 dB  
AF Output (Internal speaker): 0.7 W @ 16 Ohms, 10 % THD

### Transmitter

Power Output: 5.0 W (PEP), 1.5 W (Carrier Power) @ 7.2 V DC  
Frequency Stability: Better than  $\pm$ 10 ppm  
(+14° F to +140° F, -10° C to +60° C)  
Modulation System: Low Level Amplitude Modulation  
Spurious Emission: > 60 dB below carrier  
Int. Microphone Type: Condenser  
Ext. Mic. Impedance: 150 Ohms  
Specifications are subject to change without notice or obligation.

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