

FM Mono Band Hand Held Transceiver

# VX-120/E·170/E Series

(8-Key Version / 16-Key Version)

\*E for European Version

VX-120/E·170/E VHF

VX-127/E·177/E UHF

## Features

- 5W FM Transceiver
- Wide coverage receiver
- IPX7 Submersible 3 feet (1m) for 30 minutes
- Loud Audio 700 mW Internal Speaker
- Long Life Battery FNB-83 (7.2 V/1400 mAh) included
- Huge Display (LCD)
- Enhanced Paging and Code Squelch (EPCS)
- CTCSS/DCS included
- Security Password Feature
- Direct Keypad Frequency Entry (VX-170 Series)
- Transmit Time-Out Timer (TOT)
- Automatic Power-OFF (APO)
- Automatic Repeater Shift (ARS)
- YAESU's exclusive ARTS™ (Auto-Range Transponder System)
- RF Squelch Circuit
- 200 Standard Memory Channels with 10 Memory Banks
- Alpha-Numeric Labeling of Memories
- Dual Watch (Priority Channel Scanning)
- Emergency Feature
- Smart Search Memories
- Internet Connection (WiRES-II) Feature
- Direct DTMF Operation (VX-170 Series)
- DTMF Memory
- DTMF Pager (Requires Optional FTD-7)
- EAI: Emergency Automatic ID (except U.S. version)
- BCLO (Busy Channel Lock Out)
- Cloning
- Keypad/LCD Illumination
- External DC Jack (6-16 V DC)

**Huge LCD**

**Big 700 mW Audio!**

**1400 mAh Long Life Battery**

**IPX7**

Submersible 3 feet (1m) for 30 min.

Waterproofing specifications are assured only when using the genuine YAESU FNB-83 Battery Pack or FBA-25A Battery Holder. The use of after-market batteries or other accessories may compromise the effectiveness of the waterproofing.

**CE** (VX-120E / 170E / 127E / 177E)



VX-120/E Series  
(8-Key Version)

VX-170/E Series  
(16-Key Version)

**YAESU**  
Choice of the World's top DX'ers™

The VX-120/E•170/E Series are compact, high-performance Submersible FM hand-helds providing up to five Watts of RF power, along with big audio output (700 mW) for the 2-m or 70-cm amateur bands. Protected against water ingress to IPX7 specifications (submersion for up to 3 feet/1 meter for 30 minutes), the VX-120/E•170/E Series feature long operating times, thanks to the supplied 1400 mAh Ni-MH Battery Pack. The 8-key VX-120/E Series provides the utmost in operation simplicity, while the 16-key VX-170/E Series includes direct keypad frequency entry and direct DTMF input. And both models provide quick, one-touch access to YAESU's exciting and fun WiRES-II™ VoIP Internet Linking system!

## SPECIFICATIONS

	VHF (VX-120/170)	UHF (VX-127/177)
<b>General</b>		
Frequency Ranges	RX 137-174 MHz	RX 430-440 MHz or 420-470 MHz
	TX 144-146(148) MHz	TX 430-440(450) MHz
Channel Steps	5, 10, 12.5, 15, 20, 25, 50, 100 kHz	
Frequency Stability	±5 ppm -10° C to +60° C (-4° F to +140° F)	
Repeater Shift	±600 kHz	±5 MHz, 7.2 MHz, 1.6 MHz
Emission Type	F2D, F3E	
Antenna Impedance	50 Ω	
Supply Voltage	Nominal: 7.2 V DC, Negative Ground Operating: 6.0 ~16 V, Negative Ground (EXT DC Jack) 11~16 V, Neg. Ground (EXT DC Jack while Charging)	
Current Consumption	165 mA (Receive) 200 mW Output 45 mA (Standby, Saver Off) 20.5 mA (Standby, Saver On) 8 mA(Auto Power Off) 1.5 A (5 W TX 7.2 V DC)	165 mA (Receive) 200 mW Output 50 mA (Standby, Saver Off) 22 mA (Standby, Saver On) 8 mA(Auto Power Off) 1.8 A (5 W TX 7.2 V DC)
Operating Temperature	-4° F to +140° F (-20° C to +60° C)	
Case Size	2.4" x 4.7" x 1.3" WHD (60 x 120 x 32 mm)	
Weight	13.8 oz. (390 g) with FNB-83, antenna and belt clip	
<b>Transmitter</b>		
RF Power Output	High 5 W (@ 7.2 V FNB-83) Mid 2 W (@ 7.2 V FNB-83) Low 0.5 W (@ 7.2 V FNB-83)	
Modulation Type	Variable Reactance F2D, F3E	
Maximum Deviation	±5 kHz (F2D, F3E)	
Spurious Emissions	At least 60 dB down (High & Mid) At least 40 dB down (Low)	
Microphone Impedance	2 kΩ	
<b>Receiver</b>		
Circuit Type	Double-Conversion Superheterodyne	
Intermediate Frequencies	1st : 21.7 MHz 2nd: 450 kHz	1st: 47.25 MHz 2nd: 450 kHz
Sensitivity	0.2 μV for 12 dB SINAD (137-140 MHz) 0.16 μV for 12 dB SINAD (140-150 MHz) 0.2 μV TYP for 12 dB SINAD (150-174 MHz)	0.2 μV for 12 dB SINAD
Selectivity	NFM 12 kHz / 35 kHz (-6 dB / -60 dB)	
AF Output	700 mW @ 16 Ω for 10 % THD (@ 7.5 V) Internal SP 400 mW @ 8 Ω for 10 % THD (@ 7.5 V) EXT SP Jack	

## ACCESSORIES & OPTIONS

 <b>CMP460A</b> Waterproof Speaker/ Microphone	 <b>MH-57A4B</b> Speaker/Microphone	 <b>VC-27</b> Earpiece/Microphone
 <b>VC-24</b> VOX Headset	 <b>CT-91</b> Microphone Adapter	 <b>FTD-7</b> DTMF Paging Unit
 <b>VAC-370B/C/U*</b> Desktop Rapid Charger	 <b>CD-26</b> Charger Cradle	 <b>FBA-25A</b> Dry Cell Battery Case for 6 AA-size Alkaline cells
 <b>E-DC-5B</b> DC Cable with Cigarette-Lighter Adapter	 <b>E-DC-6</b> DC Cable; plug and wire only	 <b>CN-3</b> BNC-to-SMA Adapter

### • Accessories Supplied with the VX-120 /170 Series

**FNB-83** 7.2 V, 1400 mAh Rechargeable Ni-MH Battery Pack

**NC-88 B/C/U\*** 10-Hour Charger

**Belt Clip**

**Antenna**

\*B suffix for 120V AC, C/U suffix for 234V AC

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 Yaesu Dealer for complete details.

**YAESU** VERTEX STANDARD CO., LTD.  
4-8-8 Nakameguro, Meguro-ku, Tokyo 153-8644, Japan

For the latest Yaesu news, visit us on the Internet:  
<http://www.vxstd.com>

**VERTEX STANDARD** <http://www.vertexstandard.com>  
Email: [amateursales@vxstdusa.com](mailto:amateursales@vxstdusa.com)  
**US Headquarters** Phone +1 714-827-7600  
10900 Walker Street, Cypress, CA 90630, U.S.A.

**YAESU EUROPE B.V.**  
P.O. Box 75525, 1118 ZN Schiphol, The Netherlands Phone +31 20-5005270  
Email: [sales@yaesu.co.uk](mailto:sales@yaesu.co.uk)

**YAESU UK LTD.** <http://www.yaesu.co.uk>  
Unit 12, Sun Valley Business Park, Winnall Close Phone +44 196 286 6667  
Winchester, Hampshire, SO23 0LB, U.K.

**VERTEX STANDARD HK LTD.** <http://www.vxstd.com.hk>  
Unit 5, 20/F., Seaview Centre, 139-141 Hoi Bun Road, Phone +852 2732 2288  
Kwun Tong, Kowloon, Hong Kong

**VERTEX STANDARD AUSTRALIA PTY. LTD.**  
Normanby Business Park, Unit 14/45 Normanby Road Phone +61 3 95182100  
Notting Hill 3168, Victoria, Australia