

# VX-800U Operating Manual

## 1,Controls & Connectors

### LED Indicator

- Glows Green: Scan active
- Blinks Green: Busy Channel (or SQL off)
- Glows Red: Transmit
- Blinks Red: Battery Voltage is low

### Antenna Jack

### PTT (Push to Talk) Switch

### Monitor Button

### Lamp Button

### CH (Channel) Selector

### VOL/PWR Knob

### LCD

### SEL1 KEY (Left)

### SEL2 KEY (Right)

### Toggle SW

### MIC/SP Jack (External MIC/SP)

### Speaker

### Main Microphone

### Sub Microphone (Noise Canceling Microphone)

### Battery Pack Latch

### 16-Button DTMF Keypad (16-key version only)

## 2,Before You Begin

### Battery Pack Installation and Removal

- To install the battery, hold the transceiver with your left hand, so your palm is over the speaker and your thumb is on the top of the belt clip. Insert the battery pack into the battery compartment on the back of the radio while tilting the Belt Clip outward, then close the Battery Pack Latch until it locks in place with a “Click.”
- To remove the battery, turn the radio off and remove any protective cases. Open the Battery Pack latch on the bottom of the radio, then slide the battery downward and out from the radio while unfolding the Belt Clip.

**Caution!:** Do not attempt to open any of the rechargeable Ni-Cd packs, as they could explode if accidentally short-circuited.

### Low Battery Indication

- As the battery discharges during use, the voltage gradually becomes lower. When the battery voltage reaches 6.0 volts, substitute a freshly charged battery and recharge the depleted pack. The **TX/BUSY** indicator on the top of the radio will blink **red** when the battery voltage is low.
- Avoid recharging Ni-Cd batteries often with little use between charges, as this can degrade the charge capacity. We recommend that you carry an extra, fully-charged pack with you so the operational battery may be used until depletion (this “deep cycling” technique promotes better long-term battery capacity).

## 3,Operation

### Preliminary Steps

- Install a charged battery pack onto the transceiver, as described previously.
- Screw the supplied antenna onto the Antenna jack. Never attempt to operate this transceiver without an antenna connected.
- If you have a Speaker/Microphone, we recommend that it not be connected until you are

familiar with the basic operation of the VX-800.

**Operation Quick Start**

- To turn the top panel's **VOL/PWR** knob clockwise to turn on the radio on.
- Pull and turn the top panel's **CH** selector knob to choose the desired operating channel. A channel number or channel name will appear on the LCD.
- Rotate the **VOL/PWR** knob to set the volume level. If no signal is present, press and hold the Monitor button (the center button on the left side) more than 2 seconds; background noise will now be heard, and you may use this to set the **VOL/PWR** knob for the desired audio level. Press and hold the Monitor button more than 2 seconds (or press the Monitor button twice) to quiet the noise and resume normal (quiet) monitoring.
- To transmit, press and hold the **PTT** switch. Speak into the microphone area of the front panel grille (lower right-hand corner) in a normal voice level. To return to the Receive mode, release the **PTT** switch.
- Press the top panel's **SEL1/SEL2** button to active one of the preprogrammed functions, which may have been enabled at the time of programming by the dealer. See the next section for details regarding the available features.
- Switch the top panel's **Toggle SW** position to active one of the preprogrammed functions, which may have been enabled at the time of programming by the dealer. There are three positions of [A (left)], [B (center)] and [C (right)] in the toggle switch. See the next section for details regarding the available features.
- Press the **DTMF** keys on the telephone keypad to send DTMF tones.(16-key version only)
- If a Speaker/Microphone is available, remove the plastic cap and its two mounting screws from the right side of the transceiver, then make the connector of the Speaker/Microphone touch; secure the connector pin using the screw supplied with the Speaker/Microphone. Hold the speaker grille up next to your ear while receiving. To transmit, press the PTT switch on the Speaker/Microphone, just as you would on the main transceiver's body. **Note:** Save the original plastic cap and its mounting screws. They should be re-installed when not using the Speaker/Microphone.

**4,KEY and TOGGLE Functions**

VX-800 have the **[SEL1], [SEL2], [MON], [LAMP] Key, ([A], [B], [C], [D] Key:** only 16-key version) and **Toggle SW**. The Key and SW function can be customized, via programmed by YAESU dealer, to meet your communications requirements. Some features may require the purchase and installation of optional internal accessories. The possible KEY and SW programming features are illustrated below.

**[SEL1], [SEL2], [MON], [LAMP],[A], [B], [C] and [D] Key**

**Monitor** (Generally, it sets to MON Key)

**Lamp** (Generally, it sets to LAMP Key)

**Channel Scan**

**Dual Watch**

**High/Low Power**

**Talk Around**

**TX Save Disable**

**Encryption Disable** (only, when using DTMF/Encryption Unit)

**Follow-Me DW**

**Group Up**

**Group Down**

**Channel Up**

**Channel Down**

**SET Mode**

**Call/Reset** (only, when using DTMF/Encryption Unit)



**Weight (approx.):** 360 grams with FNB-V57, antenna, belt clip

**RECEIVER**

**Circuit Type:** Double-conversion super-heterodyne  
**IFs:** 44.25 MHz & 450 kHz  
**12-dB SINAD Sensitivity:** < 0.2  $\mu$ V  
**Squelch Sensitivity:** < 0.25  $\mu$ V  
**Selectivity:** > 70 dB  
**Intermodulation:** > 70 dB  
**Spurious Rejection:** > 70 dB  
**Image Rejection:** > 70 dB  
**AF Output:** 0.5 W @ 16  $\Omega$ , 5 % THD (BTL output)

**TRANSMITTER**

**Power Output:** 5.0/1.0 W (Selectable)  
**Frequency Stability:** better than  $\pm$ 2.5 ppm  
**Modulation System:** Direct FM  
**Maximum Deviation:**  $\pm$ 2.5 kHz (12.5 kHz)/ $\pm$ 5 kHz (25 kHz)  
**FM Noise:** > 35 dB (12.5 kHz)/> 40 dB (25 kHz)  
**Spurious Emission:** > 60 dB below carrier  
**AF Distortion (@ 1 kHz):** < 5 %  
**Microphone Type:** 2-k $\Omega$  condenser

*Specifications are subject to change without notice or obligation.*

**Accessories & Options**

**FVP-25** Encryption/DTMF Pager Unit  
**FNB-V57** 7.2 V 1100 mAh Ni-Cd Battery  
**FBA-25** Battery Case  
**NC-XX** 13.8 VDC Rapid Desk-Top Charger  
**NC-XXB** 120 VAC Rapid Desk-Top Charger  
**NC-XXC** 230-240 VAC Rapid Desk-Top Charger  
**NC-XXU** 230 VAC Rapid Desk-Top Charger  
**NC-XX** Overnight Desktop Charger  
**VTP-50** VX-Trunk Unit  
**MH-XXB4B** Speaker/Microphone  
**MH-XXA4B** Earpiece Microphone  
**VC-XX** VOX Headset  
**CT-71** PC Programming Cable  
**CT-27** Radio-to-Radio Programming Cable

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