

## COMMUNICATIONS RECEIVER

# VR-500

All-Mode Wideband Receiver



**Ultra Compact Size!**  
58 mm x 24 mm x 95 mm

Simulated display / keypad illumination

## CARRY THE WORLD WITH YOU!

**Continuous Coverage:**  
100 kHz to 1299.99995 MHz!

**All Mode Reception:**  
FM, Wide-FM, USB, LSB, CW, and AM!

**Huge Memory Capacity:**  
1091 Channels!

### MINIATURE HIGH-PERFORMANCE MONITORING STATION

Yaesu's years of hand-held transceiver design know-how bring you the ultra-compact VR-500 Receiver, measuring just 58 x 24 x 95 mm (2.28" x .95" x 3.74") and weighing 220 g (less than 1/2 lb.)! Take the VR-500 anywhere you go... and stay on top of the action!

### MULTIPLE POWER SOURCE CAPABILITY

The VR-500 accepts a variety of DC power sources. For everyday portable operation, use two "AA" batteries. Available as an option is the FNB-59 Ni-Cd Battery Pack, which can be recharged for maximum convenience. For operation from your car or truck, choose the E-DC-5B DC Cable with Cigarette lighter Plug. Also available are the NC-60B/C AC Adapter and the E-DC-6 DC Cable, for use with an external DC power source.



### WIDE BAND, MULTI-MODE FREQUENCY COVERAGE

Providing continuous\* frequency coverage from 100 kHz through 1299.99995 MHz, the VR-500 includes reception of narrowband FM, wideband FM (for broadcast/TV), SSB (USB/LSB), CW, and AM.

\*Cellular telephone frequencies are blocked and cannot be restored.

### DIRECT KEYPAD FREQUENCY ENTRY

For ease of access to any operating frequency, use the front panel's 10-key keypad to enter the frequency digits directly. The VR-500 includes automatic mode and frequency step selection, aligning you with the standard band configurations in use worldwide.

### LARGE HIGH-OUTPUT SPEAKER

The large (32 mm) front-panel speaker provides clean, crisp audio output, whether you're listening to FM broadcast, business communications, or SSB ham radio messages!

### IDEAL FOR OUTDOOR USE

The VR-500's tough polycarbonate case is designed to withstand the rigors of backpacking, camping, or other outdoor activities.

### REAL-TIME 60-CHANNEL\* BAND SCOPE

For monitoring band activity above and below your current listening frequency, the VR-500 provides one-touch access to its 60-channel\* Band Scope. The radio will sweep the band, making a note of activity on the band, so you can quickly move frequency to listen to active channels.

\*Range 5 MHz/Step 100 kHz

### FULL ILLUMINATION FOR DISPLAY AND KEYPAD

Operation of the VR-500 is a pleasure, thanks to the large (18 x 37 mm) 24-character + 7 x 60 Dot Matrix display. The display and keypad's keys are illuminated, too, so you can monitor any time—day or night!



**YAESU**  
Choice of the World's top DXers™

# THE VR-500 BRINGS YOU THE WORLD!



## VERSATILE SQUELCH / MONITOR KEY

Many compact receivers do not allow easy monitoring of weak signals. The VR-500, however, includes both a manual Squelch control (on the top panel) and a pushbutton Monitor key, which allows you to "open" the Squelch and listen for weak signals near the background noise level. Whether you're listening from a noisy or quiet location, the VR-500 has the adjustment capability you need!

## CONVENIENT "PRESET" OPERATING MODE

For maximum convenience in beginning an operating season, the VR-500 includes a "PRESET" operating mode, which consists of ten pre-programmed starting frequencies, complete with appropriate listening modes and channel steps. Once you've touched a key to select a PRESET band, you may then use the main tuning knob to move around the operating band you've selected. Included in the PRESET bands are the following selections:

### "Preset Mode"

Channel Number	Pre-Programmable Frequency
1	0.5200 MHz (AM)
2	3.5000 MHz (LSB)
3	7.0000 MHz (LSB)
4	14.0000 MHz (USB)
5	50.0000 MHz (CW)
6	88.0000 MHz (WFM)
7	144.0000 MHz (CW)
8	430.0000 MHz (NFM)
9	1240.0000 MHz (NFM)
.	Weather Channel
0	This is a special "PRESET" key which toggles through the Pre-Programmed Frequencies, per the following selections:
	520 kHz(AM)    1.800 MHz(AM)    3.6000 MHz(LSB)
	1240.0000 MHz(NFM)    10.5000 MHz(AM)
	430.0000 MHz(NFM)    21.0000 MHz(USB)
	144.0000 MHz(CW)    88.0000 MHz(WFM)    50.0000 MHz(CW)

## HUGE 1091-CHANNEL MEMORY SYSTEM WITH SEARCH & SCAN

The VR-500's Memory System includes a whopping 1091 total memories, with 1000 of these being "regular" memories and the balance being utilized for special features. The memories may be scanned at a rate of 12 channels per second, so you can keep up with the monitoring action.

### Regular Memories (1000 Channels)

The memory channels of the VR-500 store frequency and operating mode (USB, AM, WFM, etc.), and are partitioned into ten Memory Banks, each capable of holding up to 100 channels. You may label each memory with an Alpha/Numeric "Tag" of up to eight characters each, for easy channel recognition as you operate. Within the Memory System, you can scan only "flagged" memories (Preferential Memory Scan), scan only within the current memory bank (Bank Scan), or scan just for stations on a particular mode, like NFM (Mode Scan).

### Search Band Memories (10 Channels)

For "VFO" scanning within user-programmed band limits, the VR-500 provides ten such frequency pairs. The VR-500 will search for activity at a rate of 24 channels per second, and continue to loop within the preset band limits until you exit this operating mode.

### Preset Channel Memories (19 Channels + 10 Weather Channels)

Included in the "Preset" mode are 19 "starting point" memories for operation in the Preset mode, plus a "Weather" memory slot, which allows selection of any of the standard weather broadcast channels.

### Dual Watch Memories (10 Channels)

The Dual Watch feature allows you to monitor two frequencies, with the VR-500 rapidly switching between the two channels, looking for activity. The VR-500 will halt when one of the channels becomes occupied, and will resume when the activity ceases.

### Priority Memory (1 Channel)

While operating elsewhere on your VR-500, you can designate a special "Priority" memory to be watched for activity, as with Dual Watch.

### Smart Search™ Memories (11/21/31/41 Channels)

The Smart Search™ function causes the VR-500 to sweep the band, looking for channel activity. When occupied channels are found, the VR-500 will automatically note the frequency without stopping; thereafter, you may return to the newly-memorized channels by rotating the main tuning knob. The size of the Smart Search™ Memory Bank may be set to 11, 21, 31 or 41 channels.

## CONVENIENCE FEATURES

**1 MHz Fast Steps** for quick frequency excursions.

**Front-End 20 dB Attenuator** for operation in high-signal environments. **RF Squelch** allows muting of signals below specified signal strength. **Power On/Power Off Timers** for enhanced battery drain management. **Adjustable Battery Saver** for long battery life. **Extensive Menu Customization** of receiver operating parameters. **Clone Capability** to allow copying of memory data from another VR-500. **Computer Control** via Yaesu's ADMS-3 Windows™-compatible software. **Supplied Accessories:** Antenna, Hand Strap, Belt Clip.

## OPTIONS

 <b>FNB-59</b> Ni-Cd Battery Pack*	 <b>E-DC-5B</b> DC Cable with Cigar-Lighter Plug*
 <b>NC-60B/C</b> AC Adapter (117/234 V)*	 <b>E-DC-6</b> DC Cable*
 <b>CSC-72</b> Soft Case	 <b>CT-35</b> Cloning Cable

\* The FNB-59 may be charged in approximately 15 hours using the NC-60B/C, E-DC-5B, or E-DC-6.

## VR-500 SPECIFICATIONS

**Frequency Range:** 100 kHz~1299.99995 MHz (Cellular Blocked) **Frequency Channel Steps:** 0.05/0.1/1/5/6.25/9/10/12.5/15/20/25/30/50/100 kHz **Receiving Modes:** NFM/WFM/AM/USB/LSB/CW **Sensitivity:** [100 kHz~5 MHz] AM 1.5 μV (10 dB S/N), SSB/CW 0.6 μV (10 dB S/N); [5 MHz~160 MHz] AM 1.0 μV (10 dB S/N), SSB/CW 0.5 μV (10 dB S/N), NFM 0.5 μV (12 dB SINAD), WFM 1.5 μV (12 dB SINAD); [160 MHz~370 MHz] AM 1.0 μV (10 dB SINAD), SSB/CW 0.5 μV (10 dB S/N), NFM 0.5 μV (12 dB SINAD), WFM 1.5 μV (12 dB SINAD); [370 MHz~520 MHz] SSB 0.5 μV (10 dB S/N), NFM 0.5 μV (12 dB SINAD), WFM 1.8 μV (12 dB SINAD); [520 MHz~1300 MHz] SSB 0.8 μV (10 dB S/N), NFM 1.2 μV (12 dB SINAD), WFM 3.0 μV (12 dB SINAD) **Current Drain:** 115 mA (@60 mW Audio, 8 ), 15 mA (1:4 Battery Save On), 55 mA (Squelched, Save Off) **Battery Voltage:** 2.2~3.5 V DC (Nominal: 3V) **Battery Size:** "AA" **External DC Voltage:** 9.0~13.8 V DC, Negative Ground **Operating Temperature Range:** -10 °C~+50 °C **Antenna Impedance:** 50 **Antenna Connector Type:** BNC **Speaker Impedance:** 8 **Audio Output Power:** 90 mW (Internal Batteries), 125 mW (External DC) **Case Size:** 58(W) x 95(H) x 24(D) mm (2.3" x 3.7" x 0.9") w/o Antenna/Knobs **Weight:** 220 g (including Antenna/Battery)

Specifications are subject to change without notice or obligation.

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. 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.

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