

HF/VHF/UHF Portable Operation Just Got a Lot More Powerful! Meet the YAESU FT-8910

Portable/Base Station FT-897D



TCXO DSP

Turn your next weekend getaway into an HF DX-pedition, and leave the power supply at home!

YAESU HE/VHE/UHE ALL MODE TRANSCEIVER

USB 21.175.01\$



Shown with optional FC-30 Automatic Antenna Tuner and FP-30 AC Power Supply.



FT-897D: THE WORLD'S FIRST HF/VHF/UHF MULTIMODE PORTABLE/BASE STATION!

Now you can own a fully self-contained, high-power HF/VHF/UHF multimode transceiver that can be operated without an external power supply! With the exciting new FT-897D, you can operate fully portable at the 20-Watt power level, using the optional FNB-78 13.2V/4500 mAh Ni-MH Battery Pack (two may be installed simultaneously). Use an external 13.8 Volt power supply for 100 Watts of power on HF/50 MHz, 50 Watts on 144 MHz, and 20 Watts on 430 MHz. Or install the optional FP-30 Internal Power Supply in place of the internal batteries. . . however you configure the FT-897D, there will be no limit to the DX action you'll enjoy!



adjustment of a number of transceiver operating functions during operation. Pressing the [F] key allows selection of the operating function row. using the Selector knob, and you may then press the [A]. [B], or [C] switch, as needed, to change the setting. What's more, a number of these keys provide instant "hot key" switching to a related

Innovative FC-30 (optional) Automatic Antenna Tunei feedback for stability, and the GaAs balanced mixer design, 00 with careful gain distribution from the RF through the audio stages. 00 Flexibility in strong-signal operation is also provided by the RF Gain

negative

IF SHIFT To roll off interference using the analog IF filters, the IF Shift feature varies the frequency of the IF passband across the filter, removing interference from either the high-frequency or low-frequency side without varying the pitch of the incoming signal. ■ IF NOISE BLANKER

will send five-character letters and/or numbers via the speaker, so you can practice CW reception when the bands are dead.

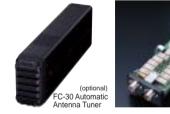
Advanced Convenience Features for





Easy Data Mode Interfacing: Configure for 1200/9600

Adding less than 2" to the total width of the FT-897D assembly, the optional FC-30 is a high-speed, relay-controlled Automatic Antenna Tuner utilizing a combination of sixteen capacitors and nine lowloss coils to reduce SWR as presented to the FT-897 feedpoint. Impedances of 17 to 150 Ohms may be tuned by the FC-30 on HF (25 to 100 Ohms on 50 MHz), and the lightning-fast tuning ensures that you won't miss out on the DX.



Unmatched Ease of Access to Features!

Big-Radio Tuning Dial and Ergonomics in Ultra-Compact Transceiver

Ease of operation of the FT-897D is enhanced by the large-diameter (1.8") Main Tuning Dial, similar

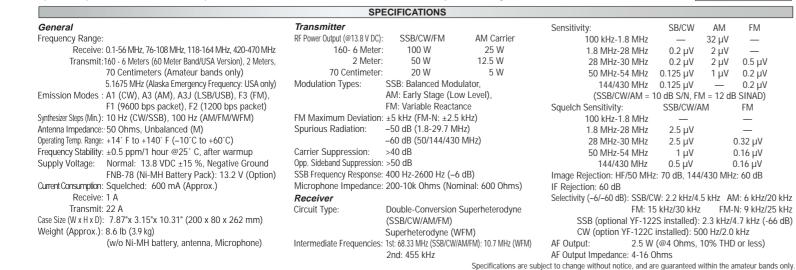
in size to the tuning knob of a large basestation transceiver. Selectable tuning steps of 2 kHz/4 kHz per revolution ensure that fine tuning is always available, while allowing easy navigation around your favorite bands.



The convenient "Clarifier" (R.I.T.) knob, located at the bottom right-hand corner of the front panel, allows offset of the receiver frequency from the transmitter frequency, to follow a drifting station or to tune around a DX pile-up. But if you want a larger knob for offset tuning, you may use the Menu system to assign the Clarifier function either to the Selector knob, or the Main Tuning Dial.

Easy-to-Use "Scrolling Front Panel" Keys

The compactness of the FT-897D is made possible by the easy-to-use "multi-function keys." which allow



and forget" configuration adjustment. And in case of the local division of the loc

item for "set

Rugged, High-Output Power Amplifier with Efficient Heat Sink

Achieving 100 Watts of power output from such a compact package is a difficult mechanical and electrical engineering task. On HF, push-pull 2SC2782A bipolar driven by push-pull RD07MVS1 provide the 100-Watt power capability, while on VHF maximum efficiency during battery operation is yielded by RD70HVF1 MOSFET PA transistors. The rugged aluminum die-cast chassis provides a solid foundation for the heat sink for the power amplifier with a total of almost 40 cubic inches of heat sink

surface area available. With its quiet, thermostatically-controlled twin cooling fans, the FT-897D will stand up to the rigors of DX-pedition or home contest



TX POWER OUTPUT

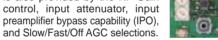
HF 50 MHz 144 MHz 430 MHz FT-897D 100 (20W) 100 (20W) 50 (20W) 20 (10W) () indicates Power Output during operation using internal batteries.

Take the QRP Challenge

Ideal for low-power operation under battery power, the FT-897D is easily adjusted down to the 5-Watt limit for "QRP" operation, and you'll enjoy the thrill of having those rare DX stations come back to your "flea power" portable station

Nice Ears!! Legendary YAESU Receiver Design

When you've traveled a great distance to find that ultimate quiet operating location, you want a great receiver so as to take advantage of it! Yaesu's top receiver design team crafted the front end of the FT-897D, accounting for the dramatic differences between low bands like 160 meters and the 430 MHz microwave band. Wide dynamic range and



low noise low noise figure are the product of the

advanced preamplifier stage with

High-Performance PLL Design

The quiet, fast-acting local oscillator system of the FT-897D borrows extensively from the renowned FT-847, using a Direct Digital Synthesizer (DDS) to achieve fast lock times and silky-smooth tuning in 10 Hz steps. The excellent carrier-to-noise ratio helps preserve spurious-free dynamic range in a crowded band, and the smooth tuning leaves you with the feeling you re using an analog VFO.

Digital and Analog Interference/Noise Reduction

The FT-897D includes a wide array of analog and DSP filters to help you dig out those weak DX signals on a crowded band! One-touch activation of the DSP filters, plus a convenient "DSP" LED on the front panel, enhance the

DSP BANDPASS FILTI

Separate DSP Bandpass augment the analog filt improvement in signal-to-n reduction. For Voice mo high-side cutoff frequen adjustable, and for CW you of 240 Hz, 120 Hz, or a raz

P AUTO-NOTCH FILTER	SSB DSP Bandpas
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Auto-Notch provides a	
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carriers are present, the DSP Auto-Notch Filte DSP will detect and notch all the carriers present. N0784 04 DSP NOISE REDUCTION The verv effective DSP Noise Reduction filter of the FT-897 is a tremendous operating aid.

greatly reducing background noise without introducing annoying distortion of the desired signal. Operator fatigue is reduced, while signal-	DSP Noise Reduction
fatigue is reduced, while signal- to-noise ratio is significantly enhanced.	
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SB/CW

0.2 uV

0.2 µV

SSB/CW/AM

2.5 µV

2.5 µV

0.5 µV

1 μV

0.125 µV

AM

32 µV

2 uV

2 µV

1 μV

FM

0.5 µV

0.2 µV

0.2 µV

FM

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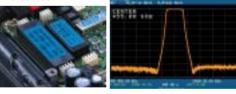
0.32 µV

0.16 µV 0.16 µV

Another noise reduction circuit, in addition to the DSP Noise Reduction, is the IF Noise Blanker. Noise pulses are detected early in the receiver. then amplified and used to drive a carefully-timed gate in the receiver IF that blanks out impulse-

Upgrade with Collins[®] Mechanical Filters for SSB and CW!

To enhance performance on both receive and transmit, high-performance Collins® Mechanical Filter options are available for both SSB and CW. For SSB, the 2.3 kHz, 10-pole model YF-122S (optional) provides a very flat passband response, for naturalsounding transmit audio, along with excellent skirt selectivity. And for CW, the 500 Hz, 7-pole YF-122C (option) helps separate signals on a crowded band in a contest



g Features for the CW Aficionado!

features are tailored to the CW enthusias

om home or on an expedition! CW Tuning indicator, CW Pitch control, eyer with three memories and Weight Control, and selection of Full QSK or "Semi-breakin" operation. For DX-pedition use, a unique "Beacon" mode allows you to send a repetitive message on, for example, six meters, to help others spot propagation to your location. And if you're looking to upgrade your license class, the CW Trainer feature



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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VHF/UHF Operation! Both CTCSS and DCS Encoder/Decoders are built in!

For easy access to repeaters, a 50-tone CTCSS

system works along with a 104-code Digital Code

Squelch (DCS) in the FT-897D. For applications

requiring split CTCSS/DCS access, a convenient

High-Stability Reference Oscillator Included:

The TCXO-9 provides ±0.5 ppm stability at

77°F/25°C for applications requiring very high

Versatile Memory System!

The FT-897D provides up to 200 "Main" memory

channels, each of which may be named with an

Alpha-Numeric label of up to eight characters.

For added convenience, you also get a "Quick

Memory" and a "Home Channel" on each band,

plus ten pairs of band-limit memories, to let you

And Much, Much More.

Large, Multi-Color Display: You can even program

the display to show different colors on each band,

mode, Memory Group, or even to track signal

restrict operation to a sub-band, if you like.

YÄESU.01

21.295.00

'Split Tone" feature is also provided!

frequency accuracy.

These 200 Memories may

be separated in as many

as 10 Memory Groups of

20 Memories each.

strength by color!

bps Packet, RTTY, or PSK31 in minutes. Transmit Data Level is adjustable via the Menu.

DSP Microphone Equalizer:

Focus the available power to match your voice characteristics.

Two Antenna **Connectors:** Separate jacks for HF/50 MHz and 144/430 MHz.



Versatile Scanning Features: VFO Scan, Memory Scan, Band-Limited Scanning (PMS), and Dual Watch.

Smart Search™: Automatic "Soft" Memory Channel loading system

ARTS™: Auto-Range Transponder system tells you if another ARTS-equipped station goes out of communications range

Spectrum Scope:

Watch activity ±9 or ±63 channels from your current frequency.

VOX: With separate adjustments for voice delay and CW receiver recovery time.

Auto Power Off (APO), Time-Out timer (TOT) and Automatic Repeater Shift

CAT System: Computer programming capability for DX/contest logging software, etc.

he ease of using the DSP.	1 0
Filters for Voice and CW	Outstanding
ters, yielding a dramatic noise ratio and interference odes, both the low- and	A wide array of operating fron
ncies are independently ou may choose bandwidths	Included are a Electronic Key

01 240 112, 120 112, 01 0 10201 31	1410 00 112.
DSP AUTO-NOTCH FILTER	SSB DSP Bandpass
To reduce interference caused	um cur
by annoying carriers within	
the receiver passband, the	
DSP Auto-Notch provides a	No. 6 August 1
significant reduction in the	
interference level. If multiple	0.0 2.0 FREQUENCY