

Automatic-Matching 100-Memory Antenna Tuner

# FC-40

100 Match-Point Data Memories

## Automatic Matching for FT-897/857 Series Transceivers

The FC-40 is a microprocessor-controlled antenna impedance matching network designed to provide all-amateur-band transmitting capability with the FT-897/857 Series of transceivers, when used with an end-fed random wire or long whip antenna.

The FC-40 makes use of the control circuitry built into the transceiver, which allows the operator to control and monitor automatic operation of the FC-40, which mounts near the antenna feedpoint. The FC-40 uses specially-selected, thermally-stable components, and is housed in a waterproof case to withstand severe environmental conditions with high reliability.

A carefully-chosen combination of solid-state switching components and high-speed relays allows the FC-40 to match a wide variety of antennas to within a 2:1 SWR on any amateur band frequency (160 through 5 meters), typically in less than ten seconds. Transmitter power required for matching may be as little as 4 - 60 Watts, and matching settings are automatically stored in memory for instant recall when the same frequency range is selected later.

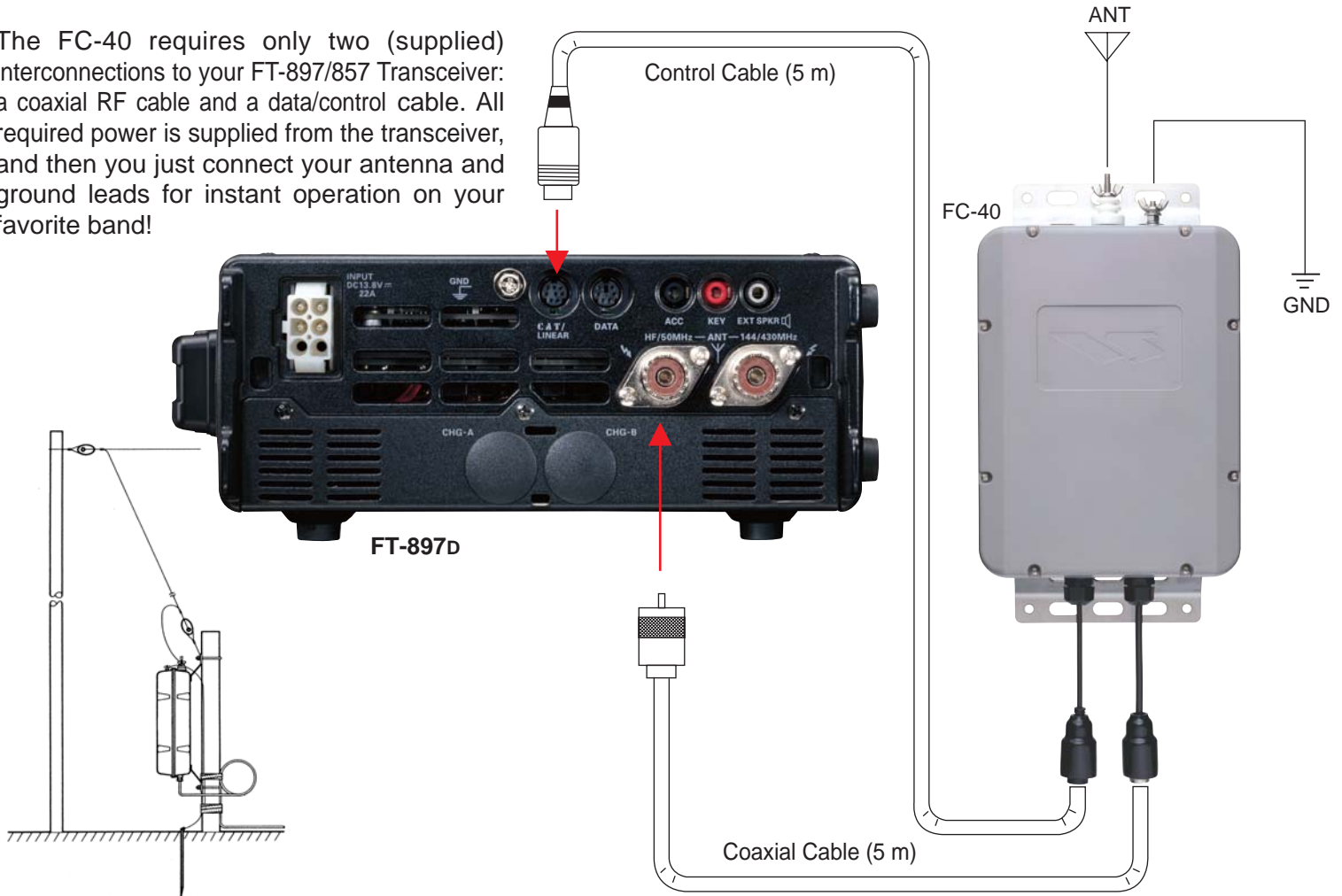
**COMPACT SIZE**

9.4" x 7" x 2.1"  
236 x 175 x 53 mm

**WATER PROOF**

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The FC-40 requires only two (supplied) interconnections to your FT-897/857 Transceiver: a coaxial RF cable and a data/control cable. All required power is supplied from the transceiver, and then you just connect your antenna and ground leads for instant operation on your favorite band!



Rugged, low-loss components are employed throughout the FC-40, to ensure reliable operation for many years in a wide range of environmental situations. The high-Q matching network ensures the efficient transfer of power to the antenna radiating element, with the convenience of instant band change thanks to the microprocessor control circuitry.



## Specifications

Operating Frequency Range: 1.8 - 54 MHz with 20+ m end-fed wire,  
7 - 54 MHz with YA-007 HF 2.5 m Mobile Whip Antenna

Input Impedance: 50-Ohms  
Maximum Power: 100 Watts  
Matched SWR: 2.0:1 or less  
(if antenna is not a multiple of 1/2  $\lambda$ )

Tune-up Power: 4 W ~ 60 W  
Tune-up Time: 10 seconds maximum  
Impedance Matching Memories: 100 channels  
Power supply: 13.8 V DC  $\pm$ 15% (supplied from transceiver)  
Case Size (WHD): 9.4" x 7" x 2.1" (236 x 175 x 53 mm)  
Weight: 2.6 lbs. (1.2 kg)

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.

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