

## VX-450 Series

## VHF Band Service Manual

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ECTION NOTE:

VERTEX STANDARD CO., LTD.
4-8-8 Nakameguro, Meguro-Ku, Tokyo 153-8644, Japan
VERTEX STANDARD
US Headquarters
10900 Walker Street, Cypress, CA 90630, U.S.A.
YAESU UK LTD.
Unit 12. Sun Valley Business Park, Winnalt Close
Winchester, Hampshire, S023 0LB, U.K.
VERTEX STANDARD HK LTD.
Unit 1306-1308, 13F, Millennium City 2, 378 Kwun Tong Road,
Kwun Tong, Kowloon, Hong Kong
VERTEX STANDARD (AUSTRALIA) PTY., LTD.
Tally Ho Business Park, 10 Wesley Court, East Burwood, VIC, 3151

#### Introduction

This manual provides the technical information necessary for servicing the VX-450 Series Transceiver.

Servicing this equipment requires expertise in handing surface-mount chip components. Attempts by non-qualified persons to service this equipment may result in permanent damage not covered by the warranty, and may be illegal in some countries.

Two PCB layout diagrams are provided for each double-sided board in this transceiver. Each side of the board is referred to by the type of the majority of components installed on that side ("Side A" or "Side B"). In most cases one side has only chip components (surface-mount devices), and the other has either a mixture of both chip and leaded components (trimmers, coils, electrolytic capacitors, ECs, etc.), or leaded components only.

As described in the pages to follow, the advanced microprocessor design of the VX-450 Series Transceiver allows a complete alignment of this



16 key Type 4 key Type

Non-key Type

transceiver to be performed without opening the case of the radio; all adjustments can be performed from the front panel, using the "Alignment Mode" menu.

While we believe the information in this manual to be correct, VERTEX STANDARD assumes no liability for damage that may occur as a result of typographical or other errors that may be present. Your cooperation in pointing out any inconsistencies in the technical information would be appreciated.

#### Important Note

This transceiver was assembled using Pb (lead) free solder, based on the RoHS specification.

Only lead-free solder (Alloy Composition: Sn-3.0Ag-0.5Cu) should be used for repairs performed on this apparatus. The solder stated above utilizes the alloy composition required for compliance with the lead-free specification, and any solder with the above alloy composition may be used.

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# **Vx 30operating Manual**

**Minjie Lin** 

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