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SERVICE MANUAL

UHF TRANSCEIVER

IC-F210
IC-F211
IC-F221

INTRODUCTION

This service manual describes the latest service information for the **IC-F210, F211 and F221** UHF MOBILE TRANSCEIVER at the time of publication.

MODEL	VERSION	SYMBOL
IC-F210	Europe	EUR
	General	GEN
IC-F211	General	GEN
IC-F221	U.S.A.	USA

To upgrade quality, any electrical or mechanical parts and internal circuits are subject to change without notice or obligation.

DANGER

NEVER connect the transceiver to an AC outlet or to a DC power supply that uses more than 16 V. This will ruin the transceiver.

DO NOT expose the transceiver to rain, snow or any liquids.

DO NOT reverse the polarities of the power supply when connecting the transceiver.

DO NOT apply an RF signal of more than 20 dBm (100 mW) to the antenna connector. This could damage the transceiver's front end.



ORDERING PARTS

Be sure to include the following four points when ordering replacement parts:

1. 10-digit order numbers
2. Component part number and name
3. Equipment model name and unit name
4. Quantity required

<SAMPLE ORDER>

1110003490 S.IC TA31136FN IC-F210 MAIN UNIT 5 pieces
8810009990 Screw PH BT M3x8 ZK IC-F210 Bottom cover 10 pieces

Addresses are provided on the inside back cover for your convenience.

REPAIR NOTES

1. Make sure a problem is internal before disassembling the transceiver.
2. **DO NOT** open the transceiver until the transceiver is disconnected from its power source.
3. **DO NOT** force any of the variable components. Turn them slowly and smoothly.
4. **DO NOT** short any circuits or electronic parts. An insulated tuning tool **MUST** be used for all adjustments.
5. **DO NOT** keep power ON for a long time when the transceiver is defective.
6. **DO NOT** transmit power into a signal generator or a sweep generator.
7. **ALWAYS** connect a 40 dB to 50 dB attenuator between the transceiver and a deviation meter or spectrum analyzer when using such test equipment.
8. **READ** the instructions of test equipment thoroughly before connecting equipment to the transceiver.

EXPLICIT DEFINITIONS

FREQUENCY COVERAGE

Low band	400–430 MHz
Middle band	440–490 MHz

CHANNEL SPACING

Wide/Narrow-type	12.5 kHz/ 25.0 kHz
Middle/Narrow-type	12.5 kHz/ 20.0 kHz

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