



IC-202

2 METER BAND
SSB TRANSCEIVER



INSTRUCTION
MANUAL



TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	SPECIFICATIONS	2
III.	ACCESSORIES	3
IV.	PRE-OPERATION	3
V.	DESCRIPTION OF CONTROLS AND CONNECTIONS	4
VI.	OPERATION	6
VII.	THEORY	8
VIII.	INSIDE VIEW	17
IX.	BLOCK DIAGRAM	18

SECTION I INTRODUCTION

Congratulations on the purchase of the IC-202, portable 2 meter SSB transceiver. The IC-202 was designed to be operable anywhere like most portables, but we also included features like a very effective noise blanker, RIT, S&RF meter, and a full 3 watts output. Two built-in crystals in the stable VXO allow operation between 144.0 and 144.4 MHz. If you wish to expand the range of the IC-202, we have also provided 2 spare crystal sockets for your convenience. With a slight retuning of the IC-202, and installation of a special crystal, you may also work through Oscar or USB.

The aluminum die cast frame provides a very strong yet light housing for the 2 circuit boards, and the aluminum sides snap off easily if service is necessary or to change the batteries.

The IC-202 operates on 9 inexpensive C cell batteries, or on an external 13.8V DC source. We recommend the IC-3PS which not only provides power for the IC-202, but also doubles as a stand and holder for the IC-20L 10 watt linear amplifier.

You can use the built-in whip antenna for portable use or another antenna connects to the external antenna connector on the back of the IC-202.

We are sure that you will have years of lasting enjoyment from your IC-202, manufactured by the leader in communication equipment: Inoue Communication Equipment Corporation.



SECTION II SPECIFICATIONS

GENERAL:

Number of Semi-Conductors	Transistor	19
	FET	7
	IC	7
	Diodes	33
Frequency Coverage	144.00—145.00MHz	
Frequency Stability	$\pm 200\text{Hz/HR}$ @25°C	
Modulation Type	(A3J), (A1)	
Antenna Impedance	50 ohms unbalanced	
Power Supply	DC13.8V $\pm 15\%$	
Current Drain	Negative Ground Transmitting:	
	A3J	Approx. 540mA
	A1	Approx. 750mA
	Receiving at Max. Audio Output:	Approx. 250mA
	with no signal:	Approx. 90mA
	Dial Light:	Approx. 40mA
Dimensions	183mm(H) x 61mm(W) x 162mm(D)	
Net Weight	2.0Kgs including batteries	

TRANSMITTER:

Frequencies	144.00—145.00MHz	
	2 Crystal built-in for 144.00—144.40MHz. Each Crystal for continuous coverage of 200KHz. Two spare crystal sockets. Connection with external VFO available.	
Modulation Type	A3J (USB) and A1	
RF Output Power	A3J	3W(PEP)
	A1	3W
Carrier Suppression	Better than 40dB	
Opposite Side Band Suppression	Better than 40dB/1KHz	
Spurious Radiation	Better than -60dB	
Modulation System	Balanced Modulation	
SSB Producing System	Filter Type	
Microphone Impedance	600 ohms	

RECEIVER:

Frequencies	Same as Transmitter	
Modulation Type	A3J(USB) and A1	
Receiving System	Single Super Heterodyne	
Intermediate Frequency	10.7MHz	
Sensitivity	0.5 μ V at (S + N)/N 10dB or better	
Spurious Sensitivity	Better than -60dB	
Selectivity	$\pm 1.2\text{KHz}$ or better at -6dB	
	$\pm 2.4\text{KHz}$ or better at -60dB	
Audio Output	More than 1W	
Audio Output Impedance	8 ohms	