

# **Programming Manual**

iCOM repeater

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**Telecommunications Security Standards (TESS+)** 

www.wfp.org/telecommunications-security-standards tess@wfp.org

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### Introduction

This manual is intended for use by radio technicians who are familiar with similar type of repeaters equipment. It contains service information required for the equipment described that gives technicians the skills to program iCOM repeaters equipment properly

#### In this Guide

This programming manual covers the basic operation of programming iCOM repeaters. It provides guidance on using the programming software for iCOM repeaters.

#### **Other Information Resources**

NA

#### **Technical Support**

Technical support is available to assist the technician in resolving any malfunction which may be encountered. Initial contact should be by electronic mail or opening a ticket wherever possible. When contacting Technical Support, be prepared to provide the radio model and serial number.

#### **Training**

Contact {TESS+} or the ETC training teams.



# Repeater models covered by this manual

### **Repeaters**

ICOM repeater IF-FR5100D220VG for VHF





# Items needed for programming

### **Programming Cables**





## **Programming Software**

CS-FR5000(dPMR) Revision 2.30 Applicable radios:	CS-FR5000(dPMR) Revision 2.30	
iCOM repeater IF-FR5100 series	Cloning Software for IC-FR5000 Series	
Operating systems: Win7 and Win10	(C) 2010 - 2015 Icom Inc.	

Contact <u>tess@wfp.org</u> for guidance on how to access the programming software.



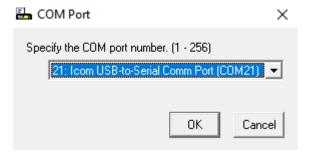
### Configuring the iCOM programming software

### iCOM CS-FR5000 (dPMR)

### Connecting the radio to the programming software

Once the CS-FR5000 (dPMR) has been installed on your computer, open it and make the following changes:

- Connect your radio via the appropriate USB cable (as specified above) to your computer.
- Select the right COM Port, COM Port ▶ Port Select



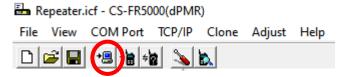


### **Programming repeaters**

### Reading, Writing and Cloning

#### **Reading the repeater**

o Click on the **Read** icon once the radio has been connected to the computer.



#### Writing the repeater

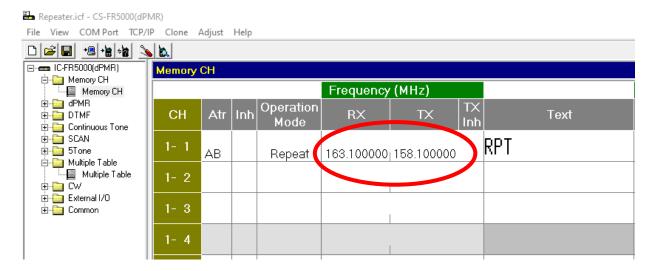
• **Write** is used to send a configuration or codeplug to the radio (check with your colleagues or email <a href="tess@wfp.org">tess@wfp.org</a> to request a copy of the UN standard codeplug).



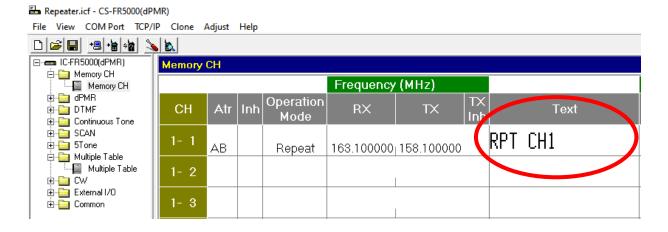


#### Cloning the repeater

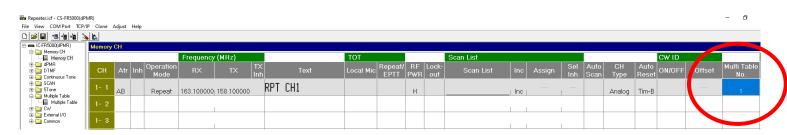
Make a new programming file for repeater from scratch, File ➤ New



- Enter the desired frequencies
- o Select the **Operation mode** ▶ **Repeat**
- o Select Ch Type ▶ Analog
- o Change the Channel name

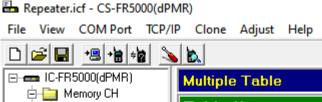


o Select Multi Table No. ▶ 1





- o **Multiple table ▶ Multiple Table ▶ Table No.1**, select the correct Rx and Tx CTCSS:
  - a. Type: Analog
  - Decode: 141.3Hz
  - Encode: 141.3Hz



	Multipl	e Table		
⊡ ⊡ Memory CH ☐ Memory CH	Table	No		
⊕ imelioly cit	I dolo	110.	'	1
⊕ • DTMF	No.	Туре	Decode	Encode
⊕ ⊕ Continuous Tone ⊕	1	Analog	141.3	<-
⊕ ⊕ 5Tone	2	Analog	111.5	
Multiple Table	3	Analog		
Multiple Table  Two CW	4	Analog		<u> </u>
⊕ External I/O	5	Analog		I
Common	6	Analog		l
	7	Analog		<u> </u>
	8	Analog		<u> </u>
	9			<u> </u>
		Analog		l
	10	Analog		<u> </u>
	11	Analog		<u> </u>
	12	Analog		l
	13	Analog		
	14	Analog		
	15	Analog		1
	16	Analog		<u> </u>

Once complete, write the codeplug to the repeaters.

