

HF/50/70MHz Transceiver

<u>Getting Started with the Icom 7300</u> <u>Quick Guide</u>

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As being a total novice to this radio myself and lucky enough to purchase the Icom 7300 from its launch in the U.K in early 2016. I have compiled this brief set up document for the Icom 7300. For the beginner , novice to set up this radio from scratch.

I can not be responsible for any procedure that might be done wrong and cause any damage to there radio.

The configuration is what I have used to operate my radio And found successful. If in doubt please check the Instruction manual

Specification IC7300

70MHz band (European versions only) Class Leading Real-Time Spectrum Scope High-Resolution Waterfall Function Audio Scope Function RF Direct Sampling System New "IP+" Function Class Leading RMDR (Reciprocal Mixing Dynamic Range) and Phase Noise Characteristics Large Touch Screen Colour TFT LCD **Multi-Dial Knob for Smooth Operation SD Memory Card Slot for Saving Data 15 Discrete Band-Pass Filters Built-In Automatic Antenna Tuner Superior Sound Quality** New HM-219 hand microphone supplied Effective large cooling fan system A Multi-function meter 101 memory channels (99 regular, 2 scan edges) **Optional RS-BA1 IP remote control software (the spectrum** scope with the waterfall can be observed) CW functions: Full break-in, CW reverse, CW auto tuning - See more at: http://www.icomuk.co.uk/IC-7300/ Amateur_Radio_Ham_Base_Stations#sthash.hYEPvTEb.dpuf

Front panel

This section describes the keys, controls and dials that you use to operate the IC-7300. Refer to the pages posted beside each key, control, or dial for details.



- POWER KEY POWER (p. 3-1) Turns the transceiver ON or OFF.
- O TRANSMIT KEY TRANSMIT (p. 3-9) Toggles between transmit and receive.
- O ANTENNA TUNER KEY TUNER (p. 7-1) Turns the antenna tuner ON or OFF, or activates the tuner.
- OX/BREAK-IN KEY VOX/BK-IN Turns the VOX function (p. 4-7) and Break-in function (p. 4-12) ON or OFF.
- HEADPHONE JACK [PHONES] (p. 2-1) Connects to a standard stereo headphones.
- 6 MICROPHONE CONNECTOR [MIC] (p. 2-1) Connects to the supplied or an optional microphone.
- VOLUME CONTROL (p. 3-1) Adjusts the audio output level.
- SD CARD SLOT [SD CARD] (p. 6-1) Accepts an SD card.
- RF GAIN CONTROL/SQUELCH CONTROL
 (AFGRF/SQL) (p. 3-9)
 Adjusts the RF gain and squelch threshold levels.
- Opens the MENU screen.

- FUNCTION KEY FUNCTION (p. 1-6) Displays the FUNCTION screen.
- MINI SCOPE KEY M.SCOPE (p. 5-1) Displays the Mini Scope or Spectrum Scope.
- B QUICK KEY QUICK (p. 1-6) Displays the QUICK MENU.
- EXIT KEY EXIT (p. 1-6) Exits a setting screen or returns to the previous screen.
- AUTO TUNE KEY (D. 4-13) Automatically tunes the operating frequency to a received CW signal.
- (D) SPEECH/LOCK KEY (main) (p. 3-9) Announces the operating frequency or receiving mode, or electronically locks (MAIN DIAL).
- TENSION ADJUSTER Adjusts the friction of (MAIN DIAL).
- (B) MAIN DIAL (MAIN DIAL) (p. 3-3) Changes the operating frequency.
- Images the Memory channel.

Front Continued



MEMO PAD KEY MPAD MPAD

Sequentially calls up the contents in the Memo Pads, or saves the displayed contents into the Memo Pad.

VFO/MEMORY KEY WM (p. 3-1)

Switches between the VFO and Memory mode, or copies the memory channel contents to the VFO.

CLEAR KEY CLEAR

Clears the RIT or ⊿TX shift frequency.

A/B KEY MB (p. 3-1)

Switches between VFO A and VFO B, or sets the selected VFO's frequency to the other VFO.

Turns the ⊿TX function ON or OFF.

@ RIT KEY 💷 (p. 4-1)

Turns the Receiver Incremental Tuning (RIT) function ON or OFF.

SPLIT KEY SPLIT (p. 4-10)

Turns the Split function ON or OFF.

MULTI-FUNCTION CONTROL (p. 1-6)

Displays the Multi-function menu for various adjustments, or selects a desired item.

TRANSMIT FREQUENCY CHECK KEY (p. 4-8)

Enables you to monitor the transmit frequency while holding it down in the Split mode.

TX/RX INDICATOR (p. 3-9)

Lights red while transmitting and lights green while receiving.

NOISE REDUCTION KEY MR (p. 4-6) Turns the Noise Reduction function ON or OFF.

O NOTCH KEY NOTCH (p. 4-6)

Turns the Notch filter ON or OFF.

TWIN PASSBAND TUNING CONTROL (TWIN PBTOL) (p. 4-3)

Adjusts the IF filter's passband width.

PREAMP/ATTENUATOR KEY RAMPIN (p. 4-1)

Turns ON or OFF, and selects one of two receive RF preamplifiers or turns the Attenuator ON or OFF.

ONOISE BLANKER KEY MB (p. 4-5)

Turns the Noise Blanker ON or OFF.

Rear



ODC POWER SOCKET [DC 13.8 V] (p. 2-2) Accepts 13.8 V DC through the DC power cable.

@GROUND TERMINAL [GND] (p. 2-1)

Connects to ground to prevent electrical shocks, TVI, BCI and other problems.

SANTENNA CONNECTOR [ANT] (p. 2-2)

Connects to a 50 Ω PL-259 coax connector.

SOCKET [ACC] (p. 2-2)

Connects to devices to control an external unit or to control the transceiver.

USB PORT (B TYPE) [USB] (p. 2-2) Connects to a PC.

CI-V REMOTE CONTROL JACK [REMOTE] (p. 2-2)

 Connects to a PC or other transceiver for external control.

EXTERNAL SPEAKER JACK [EXT-SP] (p. 2-2) Accepts a 4~8 Ω external speaker.

KEY JACK [KEY] (p. 2-2)

Connects to a straight key, external electronic keyer, or a paddle with 6.35 mm (1/4") stereo plug.

SEND CONTROL JACK [SEND] (p. 2-2)

Connects to control transmit with non-lcom external units.

@ALC INPUT JACK [ALC] (p. 2-2)

Connects to the ALC output jack of a non-lcom linear amplifier.

TUNER CONTROL SOCKET [TUNER] (p. 2-2)

Accepts the control cable from an optional AH-4 or AH-740 AUTOMATIC ANTENNA TUNER.

COOLING FAN

Cools the PA unit when necessary.

Basic Connection to rear IC7300

Earth radio

Connect Icom power supply

Antenna plug

Usb — Dplug radio to computer No 5 (on rear) USB PORT (B TYPE) [USB]



USB CT17 CAT interface lead No 6 (on rear) Connects to a PC any usb port or other transceiver for external control.

(I have found in the past to obtain one of these from) $${\rm As}$ I no these work .$

http://www.g4zlp.co.uk/unified/IcomCAT.shtml



<u>Powering up and setting up</u> As this is a club radio (NARC) the main settings will be already installed for basic radio use and <u>will not require changing.</u> So lets go to the main lcd screen and start up.

(1) Power on radio (start up screen and icom logo)

(2)Menu (10) Gives you icon screen with choices .

(3) Press SCOPE icon this will give you the frequency and waterfall. Using the AF RF/SQL knob you can vary the amount of signal on the scope + or - vary the amount of R F and colour into the screen. You should now with good signals coming in see white graphic lines vertical on the waterfall.

Bye touching one of these lines the radio will go nearly spot on the frequency, you can fine tune by touching the frequency and using the VFO.

(Example) frequency 14.144.647

Touch the 14 and you can change the band

Touch the 144 and this will give you fast tune using VFO.

Touch the 647 and this will give you fine tune using VFO.

(4)Now we are going to set the power, comp, monitor. Pressing the (27) Multi knob (top right) it will bring up the above icons if you touch any of these icons it will highlight it in blue so it is active by using the multi knob you can adjust these to your Preference, my personal settings are as follows:

> RF Power 50%, MIC GAIN 88%, COMP 8, MONITOR OFF 66%

I have had good reports on Audio from these settings using the standard supplied microphone.

To Tune The Radio IC7300 This is quite simple and straight forward .

(1)Set to required band and frequency as described on previous page on spectrum scope.

- (2) Press Multi knob and set RF power to required tuning power (I use 15 to 20 % (watts) .
- (3) Press Tuner and hold slightly (it will light up tune in the left top corner and colour will change from Red to White, its now tuned

You have probably noticed on the Lcd screen the TX is in red this is normal and on TX transmissions it will highlight in white on TX

Now your ready to go

I have tried to keep this brief to get you started . I havefound that the Icom 7300 is a easy radio to use and has many more features that I could explain. I Found a lot of good videos on You Tube and it helped me setting up most of the modes I use so take a look.

I hope this has been helpful for the first timer ? If you need to know more I will try to help if I can.

John 2E0TWQ Norfolk Amateur Radio Club

Icom 7300 set Menu



Press set to Start

FUNCTIONS-SETTINGS

FUNCTION 1-4		<u>FUNCTION 5 – 8</u>	
BEEP LEVEL	50 %	MEMO PAD QUANTITY	5
BEEP LEVEL LIMIT	ON ON		
BAND FDCF DFFP	DEFAULT	MAIN DIAL AUTO TS	HIGH
	DEFROET	MIC UD/DOWN SPEED	ТАСТ
RF/SQL CONTROL	AUTO	MIC UP/DOWN SPEED	FASI
MF BAND ATT	ON	OUICK RIT/ TX CLEAR	OFF
TX DELAY			011
TIME- OUT TIMER (CI-V)) OFF	NOTCH SWITCH SSB	AUTO/MAN
SPLIT		NOTCH SWITCH AM	AUTO/MAN
TUNER - SWITCH	MANUAL	SSB/CW SYNCH TUNIN	G OFF
PTT START	OFF		011
PRESET MEMORY CLEAF	R	CW NORMAL SIDE	LSB
RTTY MARK FREQ	2125	SCREEN CAPTURE POW	ER SW OFF
RTTY SHIFT WIDTH	170		
RTTY KEYING POLARITY	NORM	SCREEN CAPTURE FILE	TYPE PNG
		KEYBOARD TYPE	FULL
SPEECH LANGUAGE	ENGLISH		
SPEECH SPEED	FAST	CALIBRATION MARKER	OFF
S-LEVEL SPEECH	ON		
MUDE SPEECH		REF ADJUST	50 %
SPECLEVEL	50 %		
SPEECH/ LOCK			
LOCK FUNCTION	MAIN DIAL		

Icom 7300 set Menu



Press set to Start

CONNECTORS / DISPLAY SETTINGS

CONNECTORS 1-4		DISPLAY 1-4	
ACC/USB OUTPUT SELECT	AF	LCD BACKLIGHT	45 %
ACC/USB AF OUTPUT LEVEL	82 %	DISPLAY TYPE	Α
ACC/USB AF SQL	OFF (OPEN)	DISPLAY FONT	ROUND
		METER PEAK HOLD	ON
ACC/USB AF BEEP / SPEECH OU	J TPUT OFF		
ACC/USB IF OUPUT LEVEL	50 %	MEMORY NAME	ON
		MNQ	ON
ACC/MOD LEVEL	50 %	BW POP UP PBT	ON
USB MOD LEVEL	40 %	BW POP UP FIL	ON
DATA OFF MOD	MIC / ACC	SCREEN SAVER	OFF
		OPENING MESSAGE	ON
DATA MOD	USB	MY CALL	??????
		POWER ON CHECK	ON
CI– V	—		
USB SERIAL FUNCTION	CI-V	DISPLAY LANGUAGE	ENGLISH
RTTY DECODE BAUD RATE	9600	TIME SET	
USB SEND	RTS	SD CARD	
USB KEYING (CW)	DTR	ETC OTHERS	
USB KEYING (KTTY)	DIK		

ICOM 7300 Connecting to Ham Radio Deluxe Last free Version (V 5..23.0.38)

This version V5.23.0.38 is the last free version and can be found on https://www.egr.msu.edu/msuarc/software/ham-radio-deluxe/ I have found this link safe and secure and have used it on many occasions. Download and install to computer - Click on desktop HRD icon. Now you will see the Connect Unregistered (registration is free). A good manual cn be found on :http://www.ham-radio.ch/doc/Ham%20Radio%

Company: ICOM Status Radio: IC-7700 Status COM Port: Auto-detect Speed: 9600 V CI-V Add: 94 Flow control / Interface power	Company:	Ісом			
Radio: IC-7700 V COM Port: Auto-detect V Speed: 9600 V CI-V Add: 94		ICOM	~	Status	
COM Port: Auto-detect Speed: 9600 CI-V Add: 94	Radio:	IC-7700	~		
Speed: 9600 CI-V Add: 94 Flow control / Interface power	COM Port:	Auto-detect	~		
CI-V Add: 94	Speed:	9600	~		
Flow control / Interface nower	CI-V Add:	94			
	Flow cor	htrol / Interface pow	ver S		

Fill in the registration form as same as the jpg picture on the left, The details are correct and work fine, you will notice that the Radio is set on IC7700. This is because there is no IC7300 on this software and you use the **IC7700** as the equivalent. If you put the com port on auto detect It will find it. Your Speed this is your baud rate 9600 as set in the radio also your **CI-V** Add must be changed from (74) to 94. **Do not tick the CTS**, **DTR. RTS** as they are not required. Tick always start HRD and full screen mode and also your Logbook. NOW CONNECT. You radio will connect to your pc and

software Next step is to Fill in your log book details, I.e Call sign, Address and so on and your ready to go

More settings can be found on You Tube as there are plenty of instructional videos on