

**SETUP ICOM 7100A
FOR D-RATS AND WINLINK**

D-RATS, WINLINK, SIGNALINK & SOUNDMODEM

CONTENTS:

<u>ICOM 7100A RADIO DEFAULT SETUP</u>	3
<u>D RATS SETUP</u>	4
<u>ICOM 7100A DIGITAL SETUP</u>	4
ICOM_7100A_RADIO_SETUP	4
CONNECTORS	4
D_RATS_SETUP_ORANGE_CABLE	4
<u>WINLINK SETUP</u>	5
<u>WINLINK HF WITH SIGNALINK</u>	5
<u>WINLINK EXPRESS SETUP</u>	5
WINLINK_MAIN_WINDOW_SETTINGS	5
SETTINGS	5
PREFERENCES	5
MAIN_WINDOW	5
<u>SESSION WINDOW SETUP</u>	5
WINMOR_TNC_SETUP	5
RADIO_SETUP	5
Radio Selection	5
Radio Control_Port	5
PTT_Port	5
<u>SIGNALINK SETUP</u>	
<u>ICOM 7100A SETUP</u>	6
<u>WINLINK EXPRESS SIGNALINK SETUP</u>	6
<u>WINLINK VHF WITH SIGNALINK SETUP</u>	7
<u>SOUNDMODEM SETUP</u>	7
<u>SOUNDMODEM MENU SETTINGS</u>	7
SELECT_SETTING	7
DEVICES	7
PTT_Port	7
MODEMS	7
<u>WINLINK VHF MAIN WINDOW SETTING</u>	8
<u>Winlink Express Main Setup</u>	8
<u>Winlink Express Properties</u>	8
SESSION_WINDOW	8
TNC_CONNECTION	8
TNC_PARAMETERS	8
<u>IC 7100A SETUP</u>	8
<u>RUNNING WINLINK IN VHF</u>	8

D-RATS, WINLINK, SIGNALINK & SOUNDMODEM

ICOM-7100A RADIO DEFAULT SETUP:

SET MODE: It will be either DV or FM depending on the repeater.

GPS:

GPS Set:

GPS SELECT: EXTERNAL GPS

GPS Receiver Baud Rate: 4800

GPS TX MODE: OFF

GPS AUTO TX: OFF

CONNECTORS:

USB Audio Sql: OFF (OPEN)

ACC/USB Output Selection: AF

ACC/USB AF Level: 50%

ACC/USB IF Level: 50%

ACC/MOD Level: 50%

DATA MOD Level: 50%

DATA OFF MOD: MIC, ACC

DATA MOD: ACC

CI-V:

CI-V Baud Rate: AUTO

CI-V Address: 88H

CI-V Transceiver: ON

CI-V Output (for ANT): OFF

USB/DATA1 FUNCTION:

USB2 Function: OFF

DATA1 Function: GPS

GPS Out: OFF

DV Data/GPS Out Baud: 4800

RTTY Decode Baud: 9600

VSEND Select: VHF/UHF:

9600 bps Mode: OFF

GPS:

GPS Set:

GPS Select: External GPS

GPS Receiver Baud Rate: 4800

Manual Position: Set to local position

GPS Indicator: ON

Position Format: ddd° mm/mm

Altitude/Distance Units: Feet/Mile

Speed Units: mph

D-RATS, WINLINK, SIGNALINK & SOUNDMODEM

D-RATS SETUP:

ICOM-7100A DIGITAL SETUP:

(This will list only items that will be changed for the Orange cable.)

(These are the settings that need to be changed.)

ICOM 7100A RADIO SETUP:

MODE: DV

CONNECTORS:

DATA MOD: USB *(Leave this set to USB. It will be this for normal use along with D-RATS.)*

USB2/DATA1 Function:

DATA1 Function: DV Data

DVData/GPS Out Baud: 9600

D-RATS SETUP:

(This setup is for the RTS (USB-RTS05) Orange Cable.)

Connect the serial cable to the radio for control. This will setup the radio for D-RATS and audio.

There will be three ports setup. They are SILCON LAB PORTS and the USB-RTS05 port. Use the

USB-RTS05 port number and assign it to the D-RATS RADIO PORT in the preferences.

Connect

the ORANG RTS CABLE.

Start D-RATS.

Go to File in the Menu and click on Preferences.

Select Radio.

Select add.

Enter a name that you want to call it.

Set type as Serial.

Serial port will be the port number of the Orange Cable.

Set the baud rate to 9600.

D-RATS, WINLINK, SIGNALINK & SOUNDMODEM

WINLINK SETUP:

WINLINK HF WITH SIGNALINK:

(Connect Signalink Cable to radio DATA 2 jack and USB-RTS01 to REMOTE JACK. Connect both to Computer. On the RADIO CHANGE THE MEMORY CHANGEL READ OUT FROM MEMO TO VFOA. Do this by pressing on the screen.)

WINLINK EXPRESS SETUP:

WINLINK MAIN WINDOW SETTINGS:

SETTINGS:

Winlink Express Properties: *(This is self-explanatory.)*

PREFERENCES:

Message review before downloading:

A popup window will open and display a list of incoming messages prior to download:
Check this.

Message Sending Options:

Add “// WL2K” to the subject of messages: Check this.

The rest of the preferences are your choice.

MAIN WINDOW:

Select “Winmor Winlink” from the dropdown box.

Select Open Session.

SESSION WINDOW SETUP:

(After session window and TNC are opened the radio will switch to HF USB-D)

Go to Menu, Settings:

WINMOR TNC Setup:

WINMOR Capture device: Microphone (USB Audio Codex)

WINMOR playback device: Speakers (USB Audio Codex)

(Both Microphone and Speakers device should be the same port.)

Virtual TNC host address/name: 127.0.0.1.

Virtual TNC port: 8500.

Data Port: No change.

Inbound Session Bandwidth (Hz): No change.

Drive Level: No change.

Select Update.

RADIO SETUP:

Radio Selection:

Select Settings Radio Model: Icom 7100

Baud: 9600

Enable RTS: Check this.

Radio Control Port:

Serial Port to use: *(Enter the port number for the Black Cable)*

Baud: 9600

Enable RTS: Checked

PTT Port:

Serial Port to use: Icom 7100

Select Update

COMPUTER SOUND LEVEL:

Set sound level to 50% or less or there will be no connection

D-RATS, WINLINK, SIGNALINK & SOUNDMODEM

SIGNALINK SETUP:

Connect cable from SIGNALINK to Icom 7100 Data2. Need to get this cable.

Connect cable from SIGNALINK to computer.

ICOM-7100A SETUP:

MODE: USB-D (USB-DIGITAL) *(This will change to the USB-D from WINLINK)*

FILTER: FIL1

(Connect the Black cable USB-RTS01 to radio and computer)

Set radio to VFO

No other changes need to be done to the radio

CONNECTORS:

(The only item to be checked is:)

DATA MOD: USB *(DO NOT CHANGE THIS BACK TO ACC. THIS SETTING IS OK FOR DV OR FM)*

WINLINK EXPRESS SETUP:

SESSION WINDOW SETUP:

Select channel selection:

Select Callsign to contact

Select Start to make contact

WINLINK VHF WITH SIGNALINK SETUP:

SOUNDMODEM SETUP:

Go to <http://uz7.ho.ua/packetradio.htm> and download "SOUNDMODEM 100.ZIP" Unzip it and put soundmodem on desktop. You can just run this program. There isn't any setup for it.

(SOUNDMODEM must be running before running WINLINK)

GO TO MENU SETTINGS:

(Connect the USB cable from radio to computer. In DEVICE MANAGER, PORTS (COM & LPT) There will be two SILICON PORTS. Use the smaller port number)

SELECT SETTINGS:

DEVICES:

Sound Card:

Output Device: Speakers (USB Audio Codex)

Input device: Microphone (USB Audio Codex)

(Both Speaker and Microphone will use the same Codex number)

TX Rotation: Checked

Single Channel output: Checked

Color waterfall: Checked

Stop waterfall on minimize: Checked

Minimized window on startup: Your choice to check it or not.

Server Setup:

AGWPE Server port enabled: Checked

KISS server port enabled: Unchecked

PTT PORT:

Select PTT port: Use the lower port for the silicon labs ports

Dual PTT: Checked

Swap COM pins for PTT: Unchecked

MODEMS:

D-RATS, WINLINK, SIGNALINK & SOUNDMODEM

Modem Filters Ch A:

Everything is default except the items below:

Default Settings: Checked

Pre-Emphasis Filter: None, All: Checked

Kiss optimization: Checked

Non-AX25 Ch A: Checked

Modem Type Ch A:

All default

WINLINK VHF MAIN WINDOW SETTINGS:

Go to menu settings:

Winlink Express Main Setup:

Most of this is self-explanatory

Check boxes:

Display list of pending incoming messages prior to download: Check

Warn about connections to stations holding messages: Check

Allow diagnostic information to be sent to Winlink Development team. Your Choice.

Automatically install field-test (beta) versions of Winlink Express. Unchecked

Winlink Express Properties: This is self-explanatory

Preferences:

CHECK:

Message Review before download: Checked

Message prior to download: Checked

Message sending options: Add "WL2K" to the subject of messages: Checked

The rest of the preferences are your choice

In box next to Open Session Select PACKET WINLINK.

Select Open Session

SESSION WINDOW:

TNC CONNECTION:

Packet TNC Type: Kiss

Packet TNC Model: Normal

Serial Port: TCP

Auto Connect Time: Disabled

TCP Host Port: 127.0.0.1 8100

TNC PARAMETERS:

Baud 1200: Checked

Enable IPoll: Checked

The rest is default.

IC-7100 SETUP:

MODE: FM-D

CONNECTORS:

(THE ONLY ITEM TO BE CHECKED IS:)

DATA MOD: USB ACC

(Do not change this back to the ACC. This setting will work for everything)

COMPUTER SOUND LEVEL:

Set sound level to 50% or less or there will be no connection

D-RATS, WINLINK, SIGNALINK & SOUNDMODEM

RUNNING WINLINK IN VHF:

Start WINLINK

Start session

Change to Packet Winlink

Open session:

Go to channel select

Update the table via Internet

Select a Callsign. (*Note the frequency of the callsign*)

Set radio frequency to that of the selected callsign. (*There are two frequencies for that callsign. Note that the one that is for the radio frequency is the one to use.*)

Start the session