

CWSkimmer Server (W4AX)

This program captures all CW spots on seven bands simultaneously from my QTH in Alpharetta, GA (EM74uc). The advantage of this program is that if it's spotted, I can generally work it. Therefore I don't have as many unworkable spots from a world-wide spotting source. Feel free to use this program as another spotting source at your station. There are advanced instructions later in the document that describe how to aggregate spots from multiple sources like other multiple telnet sources and packet.

Please send all feedback positive/negative to w4ax@nfarl.org.

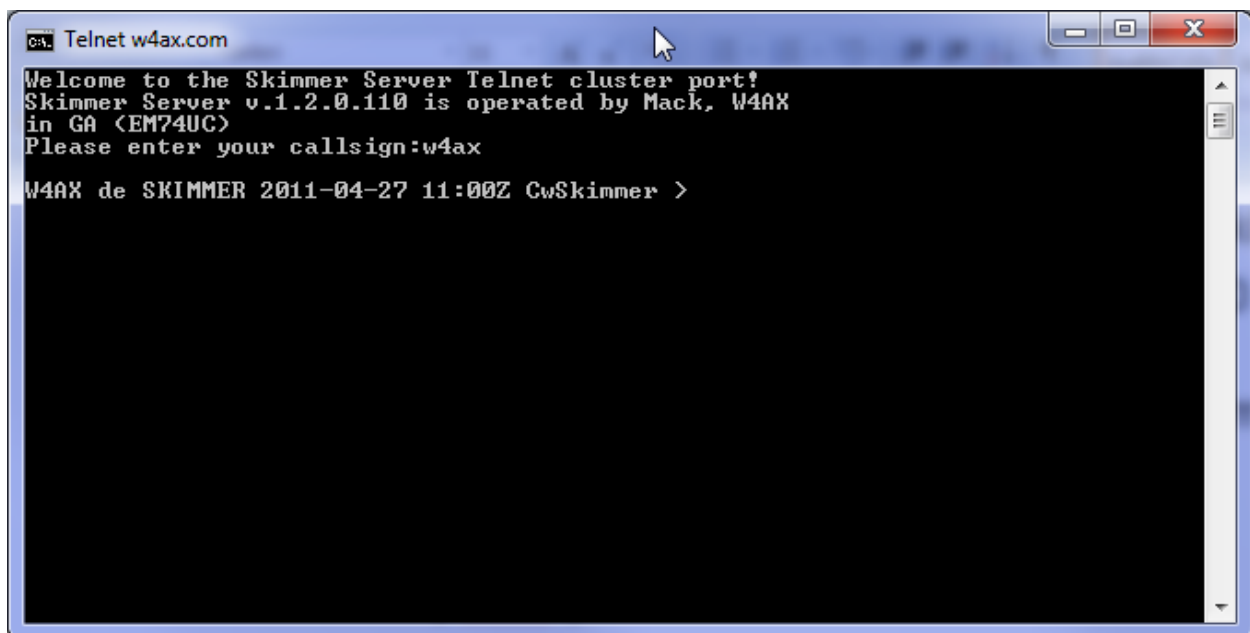
From your logging program please connect to **w4ax.com port 23**. NOTE: There is not an @ symbol in this name. This is a DNS alias pointing to the CWSkimmer Server. I am particularly interested to know if the spots are "off frequency" by more than say 50 Hz.

If you are unable to connect to the server from your logging program, you may troubleshoot by opening a command prompt.

Start | cmd | enter

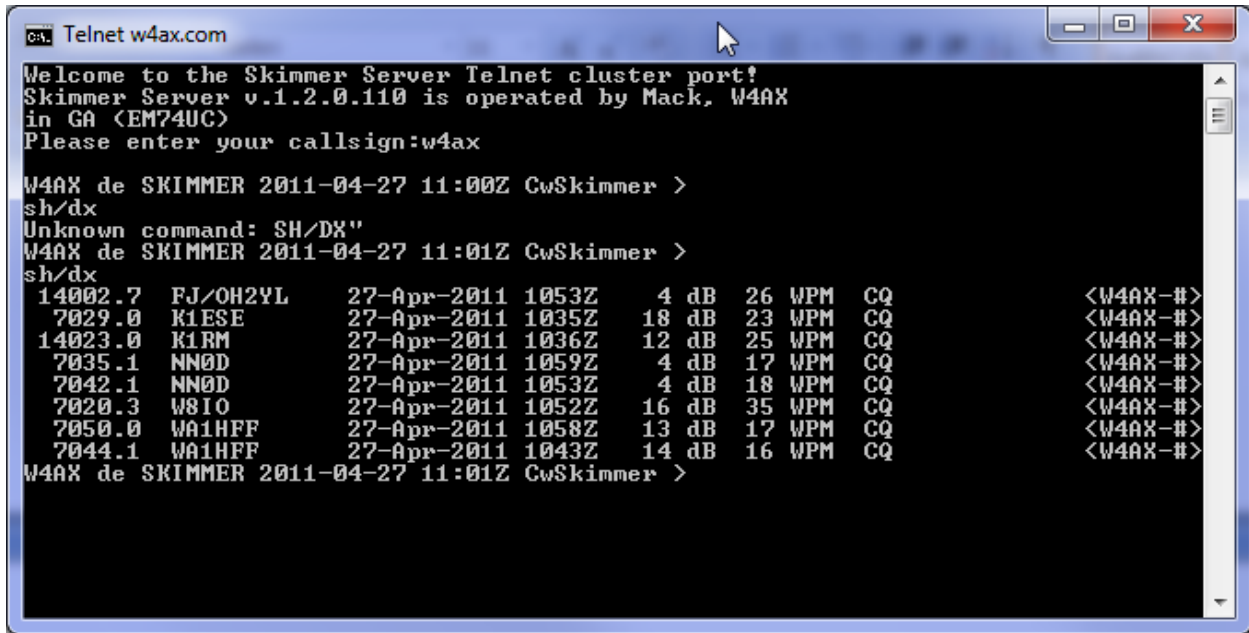
Type **telnet w4ax.com**

Enter **your callsign**



```
cs: Telnet w4ax.com
Welcome to the Skimmer Server Telnet cluster port!
Skimmer Server v.1.2.0.110 is operated by Mack, W4AX
in GA (EM74UC)
Please enter your callsign:w4ax
W4AX de SKIMMER 2011-04-27 11:00Z CwSkimmer >
```

Type **sh/dx** to list all the recent spots.



```
ca: Telnet w4ax.com
Welcome to the Skimmer Server Telnet cluster port!
Skimmer Server v.1.2.0.110 is operated by Mack, W4AX
in GA <EM74UC>
Please enter your callsign:w4ax
W4AX de SKIMMER 2011-04-27 11:00Z CwSkimmer >
sh/dx
Unknown command: SH/DX"
W4AX de SKIMMER 2011-04-27 11:01Z CwSkimmer >
sh/dx
14002.7 PJ/OH2YL 27-Apr-2011 1053Z 4 dB 26 WPM CQ <W4AX-#>
7029.0 K1ESE 27-Apr-2011 1035Z 18 dB 23 WPM CQ <W4AX-#>
14023.0 K1RM 27-Apr-2011 1036Z 12 dB 25 WPM CQ <W4AX-#>
7035.1 NN0D 27-Apr-2011 1059Z 4 dB 17 WPM CQ <W4AX-#>
7042.1 NN0D 27-Apr-2011 1053Z 4 dB 18 WPM CQ <W4AX-#>
7020.3 W8IO 27-Apr-2011 1052Z 16 dB 35 WPM CQ <W4AX-#>
7050.0 WA1HFF 27-Apr-2011 1058Z 13 dB 17 WPM CQ <W4AX-#>
7044.1 WA1HFF 27-Apr-2011 1043Z 14 dB 16 WPM CQ <W4AX-#>
W4AX de SKIMMER 2011-04-27 11:01Z CwSkimmer >
```

You should be able to see all the recent spots from your logging program or telnet session.

The dB signal relates to the signal to noise ratio at the antenna port of the receiver.

http://en.wikipedia.org/wiki/Signal-to-noise_ratio . A higher dB reading indicates a signal is further out of the noise and more decodable.

Here is what is behind the scenes at my shack:



The antenna is a long wire vertical at 75 ft with four long radials for omni-directional reception.

The antenna goes into a **RF Limiter / receiver protector** to prevent burning out the front end of the receiver when I transmit QRO from a separate antenna. <http://www.iceradioproducts.com/reonly.html>

The receiver is a Quicksilver QS1R <http://www.philcovington.com/QuickSilver/> . It is capable of receiving



192 kHz per band on seven bands simultaneously. I have it set up for the following bands right now:

160M, 80M during the **evening hours**

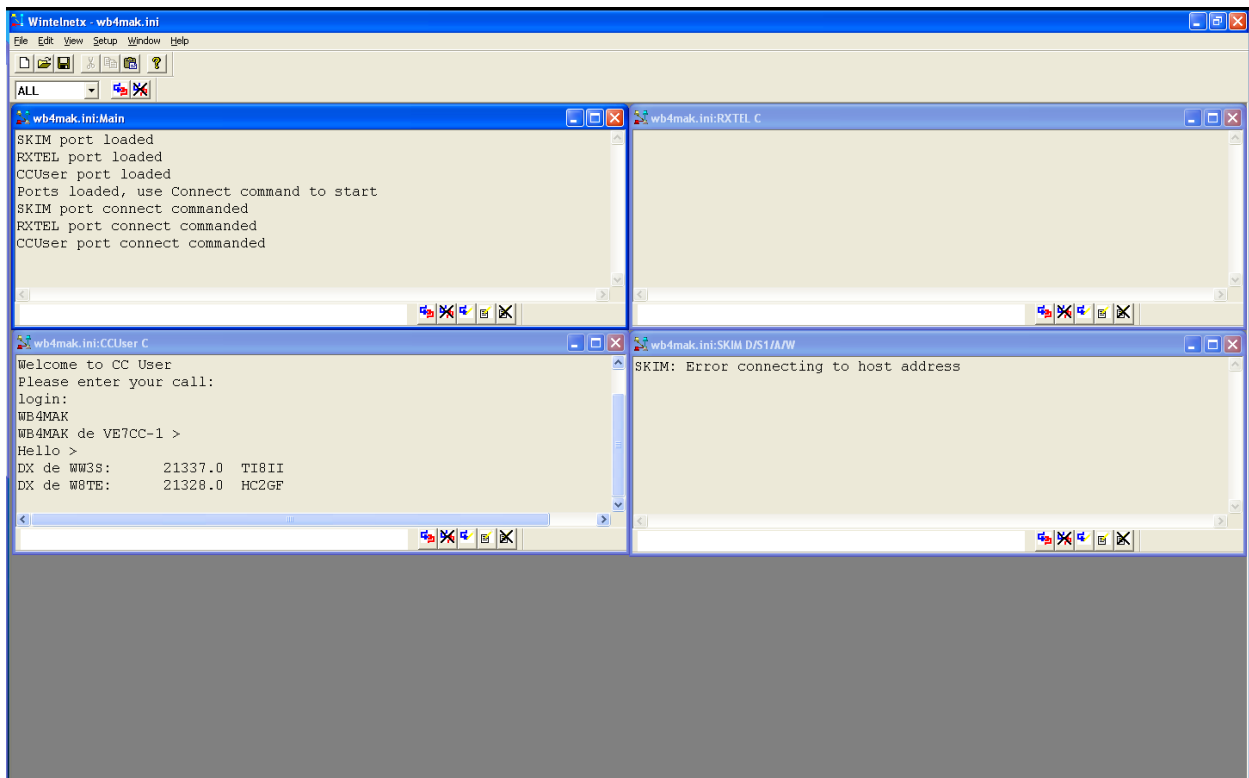
40M, 30M, 20M, 17M, 15M 24 hours per day

12M, 10M during the **daylight hours**

The Quicksilver is feeding CWSkimmer Server <http://www.dxatlas.com/Download.asp> which has the ability to skim seven bands simultaneously for CW callsigns. I have it set to ONLY decode callsigns of people calling CQ . It is also set to “aggressive” callsign lookup. I’ve found the accuracy to be 99%+. It will only report callsigns from hams calling CQ, TEST, etc after it successfully decodes the callsign three times.

I have it set to run 24 hrs per day and there is 30 Mb of Internet bandwidth feeding the server. The server also feeds the Reverse Beacon Network (a collection of these receivers) which is a great place to compare how your signal is heard in various parts of the world. <http://reversebeacon.net/main.php>

Advanced Instructions. Once you have the basic server working properly, you can add one more layer of integration. You can use **WinTelnetX** to aggregate spots from various sources including Telnet and Packet into a single Telnet port on your computer. Be sure to study the example *.ini files provided with WinTelnetX. Attached are screen shots that show how I bring spots from CWSkimmer and VE7CC CCUser (filtered) spots into a single telnet port on my computer that my logging program connects to. If this is overly complex then don’t bother with it until you need it. You absolutely *do not* need to run this program unless you want to aggregate spots from multiple sources. To automatically lanch your custom *.ini edit the program icon start properties to **C:\dnload\WinTelnetX\deliver\wintelnetx.exe wb4mak.ini –start** as an example.



RX Net Connection Setup

RX Setup

Host Name or IP: 127.0.0.1
 Port Number: 23

General Port Setup

Name: RXTEL
 Is TNC: FALSE
 Stream Switch/ID: I A
 Buffer Size: 32000
 Keep Alive Time: 0
 Port Data Type: CT User
 MyCall: MYCALL
 Hops: 99
 CR/LF: 3 (0=none, 1=cr, 2=lf, 3=cr/lf)
 AntiLoop Px: <
 Dupes: 25

Block -@ spotters
 Strip -@ and -# from spotter call

Add Console Routes Automatically

OK Cancel

Net Connection Setup

Connection Setup

Host Name or IP: 127.0.0.1
 Port Number: 7302

General Port Setup

Name: CCUser
 Is TNC: FALSE
 Stream Switch/ID: I A
 Buffer Size: 32000
 Keep Alive Time: 0
 Port Data Type: Cluster User
 MyCall: INET
 Hops: 99
 CR/LF: 2 (0=none, 1=cr, 2=lf, 3=cr/lf)
 AntiLoop Px: <
 Dupes: 0

Block -@ spotters
 Strip -@ and -# from spotter call

Add Console Routes Automatically

OK Cancel

Net Connection Setup

Connection Setup

Host Name or IP

Port Number

General Port Setup

Name

Is TNC

Stream Switch/ID

Buffer Size

Keep Alive Time

Port Data Type

MyCall

Hops

CR/LF 0=none, 1=cr,
2=lf, 3=cr/lf

AntiLoop Px

Dupes

Block -@ spotters

Strip -@ and -# from spotter call

Add Console Routes Automatically

OK

Cancel