

Fast Simple QSO's (FSQ)

By

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- **FSQ is a ham radio text communication digital mode. Can xmit files/pictures.**
- **FSQ is intended for 80-20 Meter short distance, single hop (NVIS near vertical incidence skywave)**
- **Unlike many other digital modes, it does not require synchronization.**
- **Operate in a "chat" mode. Type what you want to say, hit ENTER, and it is sent between 2 to 6 baud depending on your conditions (20-60 wpm) in a BW of 290 HZ.**
- **Uses MFSK (multi frequency shift keying) with 33 tones. Communicate fastest using lower case which only uses single tone**

Preferred FSQ Frequencies ITU Region 2 (N & S America)

- **3594 KHz**
- **7104 KHz**
- **10144 KHz**
- **14104 KHz**
- **18114, 21124, 24924, 28124, 28144, & 50644 are not officially accepted because these are not NVIS (near vert. incidence skywave) frequencies but some experiment with them**

Setting up the FSQ Software

- **Download and Open Software. Under Menu Bar, set up Sound Card, with e.g., Signalink USB Codec**
- **Menu Bar, Options, put in your call and QTH**
- **Accept Defaults on other choices until you get familiar and think you want to change them. If you have a really strong or really weak signal you may wish to speed up to 6 or down to 2 baud—3 is default**
- **Calls must always be lower case**

Software Short Commands

- **Never need to type your call—only station you are chatting with. Software makes your call show.**
- **? What is my SNR—read from lower left bar graph**
- **@ What is your QTH**
- **< or > slow down or speed up baud rate 2, 3, 4.5, 6. 3 default**
- **A number of others—see biblio**

FSQ Software Screen

FSQCALL v0.24.6 (US Edition) w4zsc

File FSQCALL Options Display Soundcard PTT/CAT Speed Image Help

w4zsc:15cqccq de w4zsc
w4zsc:15cqccq de w4zsc

Main text conversation

SNR Graph

Waterfall

Macros

Ur Xmit Text Hit Enter

Monitor Screen

Monitor | RX File | Syntax | Rules

allcall
wb8skp, 18:53, 10db

wb8skp:92
Sounded @ 18:53 <EOT> cam*ht.ys
k2diz ac:dz4b 10w sk2nh

dB
10
0
-10
-20

Signal to Noise

1100 1300 1500 1700 1900

Bright

Speed 6 4.5 3 2

QTC QTH SELCAL CQCQCQ SOUND MSG RX PAUSE TX RX

Example of FSQ Chat

FSQCALL v0.24.6 (US Edition) w4zsc

File FSQCALL Options Display Soundcard PTT/CAT Speed Image Help

sign off terry ive enjoyed chatting with you and best 73s.
[UTC time 23:30]
al
wa8wqu: its just a health kick. i ride 1 mile west on a closed road, and WALK 1 mile east (with bike) back to home. w4zsc did you have lots of camera equip
w4zsc:15wa8wqa both. had 2 nikon dsrls and a 16-300 zoom along with an 8-400 zoom. took 50 lbs of bagge and abt 25 lbs of camera gear.
wa8wqu: i travel on the bike with a little digital cannon camera on my belt. the bike is easy to get off of to take pictures.
w4zsc:15wa8wqu i am scared of motor cycles! especially at my age. i meant 80-400 not 8 on the lens. nature photog is really fun for me. have been all over world doing it. if you would like to see bear pix give me your email and i will send you the url for about a 5 min slide show.
wa8wqu: sounds like 25lb of professional equipment, you must be making money with the pix? (or lucky friends)
[UTC time 23:40]
w4zsc:15wa8wqu no money strictly hobby. guess i really better get going to watch some tv with xyl. so 73 al
wa8wqu: enjoyed talking to another camera guy, thanks and good luck with that 25lbs. 73 have a healthy happy and safe week al, 73, de Terry.
w4zsc:15wa8wqu 73 terry

Monitor RX File Syntax Rules

able to stop and take some hard to catch stuff. qk
{s} yao
wa8wqu:51w4zsc sounds like 25lb of professional equipment, you must be making money with the pix? (or lucky friends) <EOT> w4zsc thanks Al, but will pass on the slide show.~hryfdkyh
wa8wqu:51w4zsc enjoyed talking to another camera guy, thanks and good luck with that 25lbs. 73 have a healthy happy and safe week al, 73, de Terry. <EOT>
xzldhc
ci

allcall
wa8wqu, 23:43, 17db
wb8skp, 23:23, 16db
kt7az, 23:19, 10db
w5zit, 23:17, 19db
kg9b, 23:12, 16db
ko6kl, 22:46, -2db
n4wdn, 22:20, 15db
kb2sdr, 21:56, -1db
k2ahc, 21:55, 9db

dB
10
0
-10
-20

Signal to Noise

1100 1300 1500 1700 1900

Bright

Speed 6 4.5 3 2

QTC QTH SELCAL CQCQCQ SOUND MSG RX PAUSE TX RX

FSQ Image Transmission from 7 dB SNR



160x120 LoRes Col
320x240 HiRes Col
640x480 B&W

Xmit Times
48 sec
192 sec
256 sec

Internet and Bibliography

- **Developer Description and Software Download**
<http://www.qsl.net/zl1bpu/MFSK/FSQweb.htm>
- **eHam Forum**
<http://www.hamradioforum.net/threads/5798-FSQ-a-new-mode-!>
- **QST, September 2015, pp 34-39, FSQ**
- **FSQdigital Yahoo Group**
- **Fldigi digital software includes FSQ and most other digital modes** <http://www.w1hkj.com/>
- **CQ Magazine, November 2015, pp 58-61, FLDIGI and FSQ**