

# CommCat Mobile Help

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## **Part VII MyQX Logbook 55**

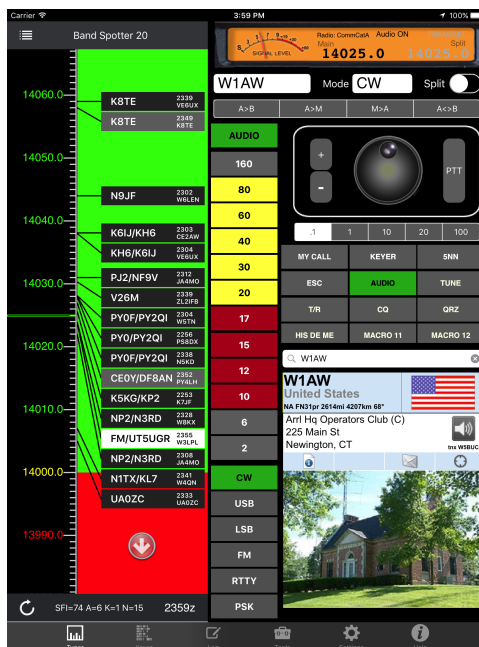
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# 1 Introduction

Welcome to CommCat Mobile!



CommCat Mobile is a powerful Universal app for radio amateurs (hams)\* that lets you operate your station from anywhere using your iPhone, iPod, or iPad.

- Transmit SSB or CW
- Built-in CW keyboard
- Watch current DX spot activity
- Receive DX Spot Push Notifications\*\*
- Look up calls and display DX info on an Instant Web Page
- Show the location of DX stations on a world map
- Listen to DX audio clips
- See photos and bios for hams
- Send e-mail to other hams
- Control your radio from your iPhone/iPod/iPad\*\*\*
- Define custom radio control macros\*\*
- Select one of up to four radios\*\*
- Control Yaesu FT-1000mp or Ten-Tec radios directly\*\*\*\*
- Log and edit contacts using your MyQSX log
- View and edit your online MyQSX log with any browser
- Create a personal web page for your station on MyQSX.net
- Show your activity on the MyQSX World Activity Map

- Turn your station rotor to the DX bearing\*\*
- Send and receive 2-way audio using VoIP
- Control repeaters with built-in DTMF Keypad



Special thanks to Dave, K5OZ, and Mike, N6MQL, for their help and inspiration during the development of CommCat Mobile.

\*If you do not have an amateur radio license, you can learn more about this exciting hobby by visiting the American Radio Relay League (ARRL) web site. In the meantime, feel free to experiment with CommCat Mobile. \*\*Requires CommCat logging program and supported rotor controller. \*\*\*Requires CommCat, QSXer/HRD, or a supported direct-connect radio. \*\*\*\*FT-1000mp and Ten-Tec Orion require Ethernet-to-serial interface. Ten-Tec Omni VII has an Ethernet connection.

CommCat Mobile was written by Howard Nurse, W6HN

## 1.1 Quick Start

Follow these steps to get started. This Quick Start assumes you are comfortable working with your router and Internet connections.

### Create an account on MyQsX.net:

1. Launch CommCat Mobile.
2. Enter your name, call and email address in the log in window.
3. If you already have a MyQsX account, enter the Registration Code, or
4. Tap Submit and watch your email for your Registration Code, then
5. Restart CommCat Mobile, enter your Registration Code and tap Submit.

### Connect to your radio:

If you are using CommCat:

1. Confirm that CommCat is controlling your radio properly.

2. In CommCat, go to File>Settings>Program>Mobile.
3. Check Mobile Enabled.
4. Check Auto Connect.
5. CommCat shows the Internet IP, LAN IP and port number. You can enter a dyndns address for the Internet IP.
6. Set up Port Forwarding in your router using the port number and LAN IP.
7. Test Port Forwarding to confirm your settings.

If you are using QSXer:

1. Start QSXer.
2. In QSXer, go to File>Settings>Personal and enter your call and email address.
3. Go to File>Settings>My Account and set up your account. Use your CommCat Mobile Registration Code if you don't already have one.
4. Go to File>Settings>Program>CommCat Mobile.
5. Check Mobile Enabled.
6. Check Auto Connect.
7. QSXer shows the Internet IP, LAN IP and port number. You can enter a dyndns address for the Internet IP.
8. Set up Port Forwarding in your router using the port number and LAN IP.
9. Test Port Forwarding to confirm your settings.

If you are using Direct Connect:

Note: Direct Connect only works with supported radios. See CommCat Mobile Remote Control settings for a current list.

1. Determine the IP of the Internet connection device (you can do this from your router connected devices window).
2. Set up Port Forwarding in your router.

### **Connect CommCat Mobile:**

1. In CommCat Mobile, go to Settings>Remote Control.
2. Confirm that the IP and Port settings are correct.
3. Select the radio you wish to use.

### **Enable CommCat VoIP:**

1. CommCat VoIP requires that you have a CommCat Live account or CommCat VoIP subscription.
2. In CommCat 4.5 or later, go to File>Settings>Live>Audio>VoIP. In QSXer 3.0 or later, go to File>Settings>VoIP Audio.
3. Put a check in the Enable VoIP box.
4. Select the audio in and audio out devices on your computer that are connected to your radio.
5. If using CommCat, go to File>Settings>Program>Mobile and put a check in AutoConnect. In QSXer, go to File>Settings>CommCat Mobile and make the same selection.

6. If using CommCat Live, send Email to CommCat Support requesting that VoIP be enabled for your account. CommCat VoIP is enabled for QSXer after your account has been set up.
7. Use the AUDIO button in the CommCat Mobile macro button bank to connect and disconnect VoIP.

**or Configure Skype:**

1. Set up two Skype accounts, one for your shack computer and the other for your iPad.
2. Connect the receive audio from your radio to the Line In on your computer.
3. Connect the Line Out on your computer to your mic input.
4. Go to Skype Tools>Options.
5. In Audio Settings, set up the incoming and outgoing audio.
6. In Calls, check Answer incoming calls automatically.
7. Start Skype on your iPad.
8. Call your shack account.
9. If using CW or just listening, mute the iPad mic to prevent AGC pumping.

## 1.2 Requirements

Here is what you need:

- iPhone (3GS or later), iPod touch (3rd gen or later), or iPad
- iOS 10.0 or later
- Internet access (Wi-Fi or Cell)
- Two Skype accounts to receive and transmit audio (free) or CommCat VoIP
- MyQsX account for logging (free)
- CommCat (4.5 or later) or QsXer 2.1+/HRD (free) logging program for radio control
- Internet connection for CommCat or QsXer
- Optional radio with Ethernet connector or Ethernet/WiFi-to-Serial adapter for direct radio control (Windows computer not required)

## 1.3 What's New

### CommCat Mobile 2.7

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- Dedicated AUDIO button freeing up a macro.
- Improved user interface for larger screen iPhones.
- iOS/Bluetooth issues fixed.
- Rich Push Notifications for DX Spots.
- Bug and cosmetic fixes.

### CommCat Mobile 2.6

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- Improved VoIP and radio control connectivity.

- Rotor control allows manual entry of a new bearing or grid square. (CommCat only.)
- Bug and cosmetic fixes.

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### **CommCat Mobile 2.5**

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- Apple Watch support, work the world from your wrist! (iPhone only.)
- Push notification to alert you when CommCat Mobile has lost contact with CommCat
- Background VoIP restored
- Receive incoming VoIP calls
- Mute VoIP mic when receiving
- Band buttons in Tuner window now have two memories. Repeat tap to go back and forth.
- 16 Macros added in Tuner window for a total of 32.
- Back up and restore macros from the cloud (Tools window)
- Calibrate CommCat Mobile S-meter in CommCat.
- Bug fixes

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### **CommCat Mobile 2.3**

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- iOS 7 Updates (iPhone 6 and 6+ version soon!)
- Band registers to retain last frequency and mode for each band
- Direct control of K3/KX3 and Kenwood radios
- Band Spotter "tap-to-tune"
- AUDIO button shows green when VoIP connected
- Faster start up
- Bug fixes

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### **CommCat Mobile 2.1**

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- Internal VoIP (2-way audio) (Requires CommCat 4.5 or later and CommCat Live account)
- Band button color reflects current conditions for that band
- Band buttons added to iPhone Tuner
- Band spotter
- CommCat Live spots
- CommCat Tweet list
- Memory Bank for favorite frequencies
- MyQSX Audio Clip list
- GUI improvements

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### **CommCat Mobile 2.0**

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- Universal app runs equally well on the iPhone or iPad
- Support for iOS 6 and the iPhone 5
- Tab bar for easier navigation

- Number bar added to keyboard for easier call entry
- New macro for launching Skype from CommCat Mobile
- Portrait or Landscape operation
- Direct connect to Ten-Tec radios through Internet
- Direct connect to Yaesu FT-1000mp or Mk V through Internet
- Launch Skype from CommCat Mobile
- UTC Clock
- ARRL DX Bulletin
- Sun info
- Elecraft K3 decoded CW/Data display
- Streamlined MyQSX.net account setup

### **CommCat Mobile 1.3**

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- Spot Push Notifications (requires CommCat)
- Radio select (requires CommCat)
- User defined radio control macros (requires CommCat)
- +/- Tuning buttons and PTT button in Tuner

### **CommCat Mobile 1.2**

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- Double-tap spot to tune from spot list
- Two frequency register memories for each band
- Fast app switching
- 6- and 2-meter bands
- Follows radio when tuned from radio or CommCat or QSXer
- Ham Radio Deluxe support using QSXer (feature subset)
- Auto sync IP addresses
- Improved CW keyboard with start, hold, speed control, macros
- Rotor control

### **CommCat Mobile 1.1**

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- Continuous radio tuning
- Live S-meter for Tuner
- Filter spots for needed DXCC entities
- Maintain your log at <http://MyQSX.net/mylog>
- Upload your station log using ADIF for viewing on iPhone
- Download your log in ADIF, Excel, or XML formats
- Macros increased to 16
- Program macros on your iPhone
- Send CW from iPhone keyboard
- Added Transmit/Receive macro
- Remote control via LAN or Internet

- Optional password protected remote control
- Bug fixes and UI enhancements

## 1.4 MyQSX Account

MyQSX.net can only process new account requests when provided with a valid amateur radio callsign.

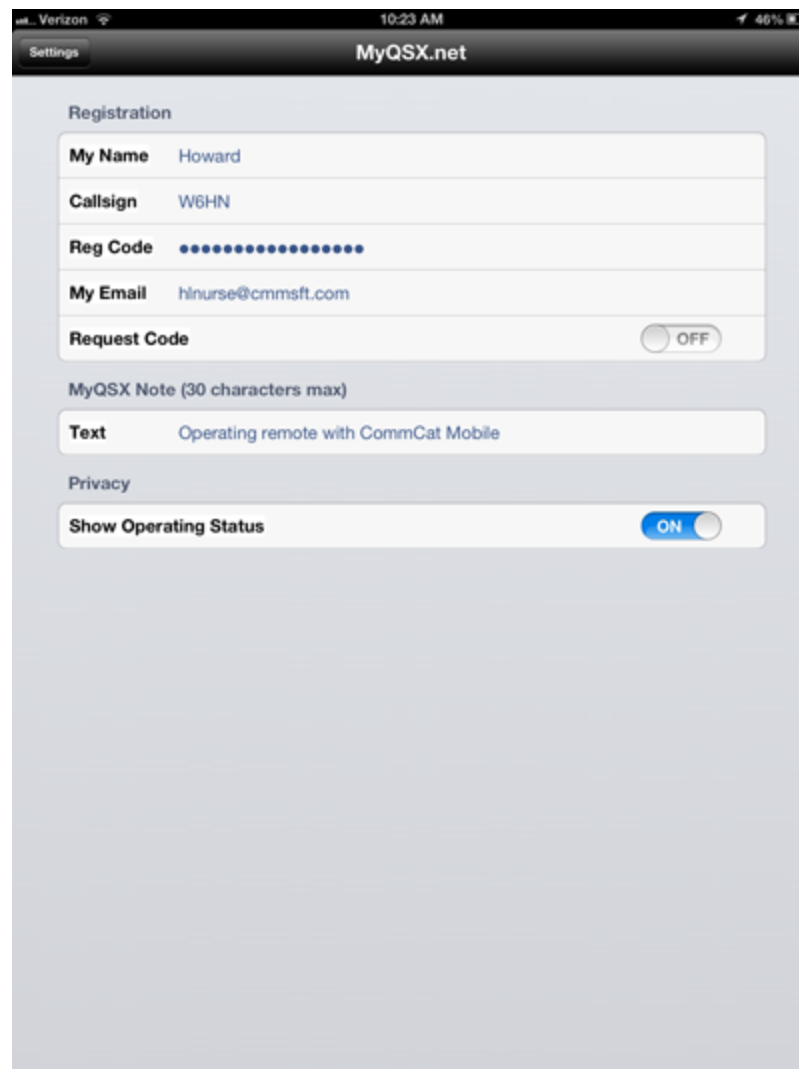
You must have an account on MyQSX to log contacts and to manage your home page. Two account levels are available: QSXer (free) and CommCat Live (subscription). A QSXer account gives you access to your online log and a limited-feature web site. CommCat Live enhances CommCat by providing many benefits, including VoIP for 2-way audio, an enhanced web site, the ability to record and present DX audio clips, automatic log synchronization with CommCat, and a public online log viewer.

If you wish to add CommCat Live to CommCat, please visit <http://www.commcats.com>. Your Live account will be set up within 24 hours. If you wish to add VoIP to your Live account (no additional cost) please let CommCat support know.

Here is how to set up a free QSXer account:

1. Launch CommCat Mobile.
2. Enter your name, call and email address in the log in window.
3. If you already have a MyQSX account, enter the Registration Code, or
4. Tap Submit and watch your email for your Registration Code.
5. Restart CommCat Mobile, enter your Registration Code and tap Submit.

You can also set up an account from CommCat Mobile settings.



The screenshot shows the 'MyQSX.net' registration screen on a mobile device. The status bar at the top indicates 'Verizon', '10:23 AM', and '40%' battery. The screen has a 'Settings' button in the top left and the title 'MyQSX.net' in the top right. The main content area is titled 'Registration' and contains several input fields: 'My Name' (Howard), 'Callsign' (W6HN), 'Reg Code' (a series of dots), 'My Email' (hlnurse@cmmsft.com), and 'Request Code' (with an 'OFF' toggle). Below these is a 'MyQSX Note (30 characters max)' section with a 'Text' field containing 'Operating remote with CommCat Mobile'. At the bottom is a 'Privacy' section with a 'Show Operating Status' toggle set to 'ON'.

1. Go to More>Settings>MyQSX.net
2. Enter your name, callsign and e-mail address. If you already have a CommCat Live or QSXer account, use the same e-mail address used for that account in CommCat Mobile.
3. If you already have a QSXer or CommCat Live Registration Code, enter the code in Reg Code. Skip the following steps.
4. Turn ON Request Code.
5. Exit Settings and your request will be submitted by CommCat Mobile.
6. After your amateur callsign has been validated, you will receive your MyQSX Registration Code by e-mail. This automated process normally takes less than a minute.



7. Enter the Registration Code in More>Settings>MyQSX.net>Reg Code.

**Important:** If you need to request your registration code again in the future, you ***must*** use the same e-mail address you used to sign up for your account.

## 1.5 QSXer

QSXer controls your radio and WinKeyer without any additional software. QSXer is also compatible with Ham Radio Deluxe (HRD). See QSXer Help for detailed information.

When used with HRD, QSXer reads and sets HRD's main and split frequencies, sets split (does not read split), reads s-meter levels, and controls PTT. The following CommCat Mobile features are available using QSXer with HRD:

- Set and read main frequency
- Set and read split frequency
- Set and read mode
- Set split on/off
- Control PTT
- Display S-meter
- Listen and transmit using 2 Skype accounts, or
- Two-way audio VoIP with a subscription
- Read HRD frequencies and modes.

CommCat Mobile functions that are not supported by HRD include:

- CW keyboard and CW macros
- Rotor control
- Read split status
- Custom radio control macros
- DX Spot push notifications from HRD
- DTMF tones.
- Apple Watch.

Download QSXer from <http://www.qsxer.com>. QSXer is freeware. Follow the instructions in QSXer Help to connect QSXer to HRD.

QSXer works with HRD version 4 and later.

## 1.6 More Help



You may contact CommCat Mobile technical support at [support@commcat.com](mailto:support@commcat.com).

Join us on the MyQsX Forum where you will find a section for CommCat Mobile:  
<http://myqsx.net/forums>.

Instructions for enabling remote control are provided with CommCat or QsXer Help.

CommCat Mobile expanded Help: <http://myqsx.net/ccMHelp>

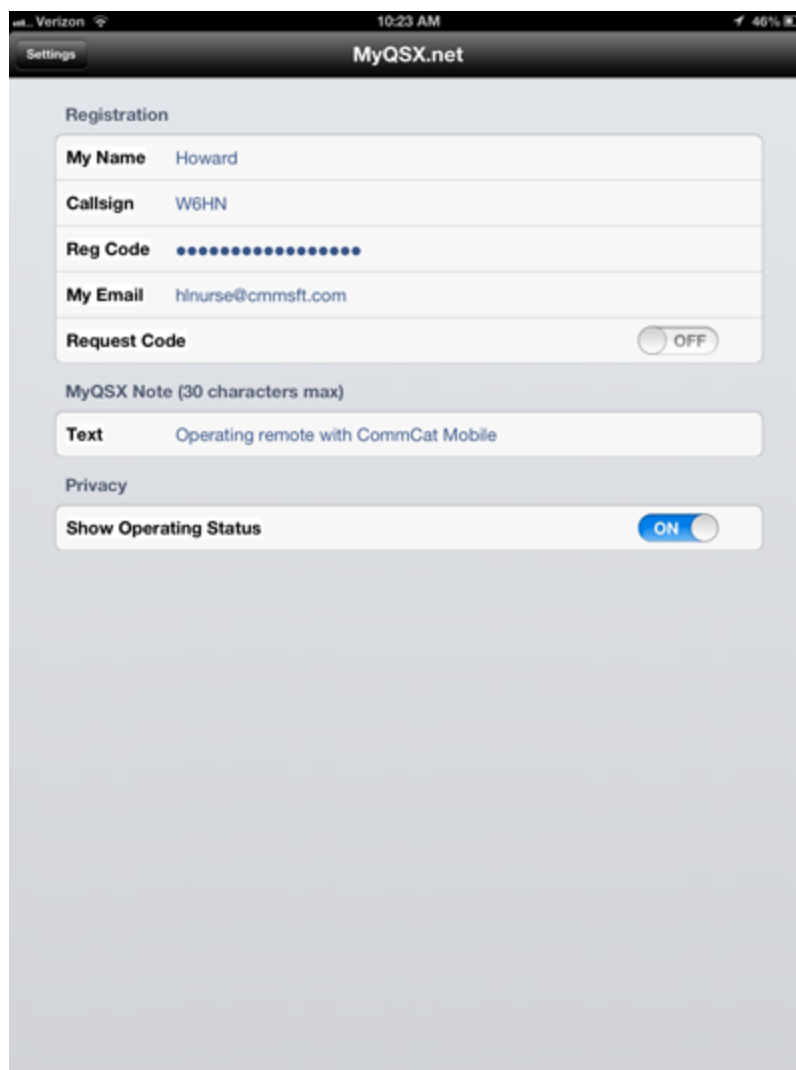
Telephone support is **not** available.

## 2 Settings

Here is how to set up your preferences on CommCat Mobile.

### 2.1 MyQSX.net

Set up your free MyQSX account. Registration sets up your logbook and MyQSX home page.

A screenshot of a mobile application interface for MyQSX.net. The status bar at the top shows 'Verizon', '10:23 AM', and '46%' battery. The app header is 'MyQSX.net' with a 'Settings' button on the left. The main content area is titled 'Registration' and contains several input fields: 'My Name' with the value 'Howard', 'Callsign' with 'W6HN', 'Reg Code' with a masked value of dots, and 'My Email' with 'hinurse@cmmsft.com'. There is a 'Request Code' field with an 'OFF' toggle switch. Below this is a 'MyQSX Note (30 characters max)' section with a 'Text' field containing 'Operating remote with CommCat Mobile'. At the bottom is a 'Privacy' section with a 'Show Operating Status' toggle switch set to 'ON'.

**My Name** Enter your name.

**Callsign** Enter your radio amateur callsign

**Reg Code** Enter the registration code you receive by e-mail after registering. This code gives you access to your logbook and optional secure radio control via CommCat.

**My Email** Your email address. Your MyQSOX registration code will be sent here. If you already have a CommCat Live or QSOXer account, this address and your existing account e-mail address must match or you will receive an error message and registration will fail.

**Request Code** Turn ON to request your registration code. Once the request has been sent, this toggle is set back to OFF.

**Text** Status note that appears with your pin on the MyQSOX.net World Activity Map.

**Show Operating Status** When you tap the CommCat Mobile tuning knob, CommCat Mobile updates your MyQSOX home page with your location, current frequency and mode. Your map pin on the MyQSOX World Activity Map is also updated. Turn Show Operating Status OFF to prevent these updates.

## 2.2 Station

Set up your station location and manage your logbook.

**Auto** Use the location provided by your device to show your current location. Great for mobile operation! Turn Auto OFF if you want to show the location described below in place of your current location.

**Latitude** If Auto is OFF, CommCat Mobile uses this latitude.

**Longitude** If Auto is OFF, CommCat Mobile uses this longitude.

**City** City CommCat Mobile uses, when Auto setting is OFF

**County** Same for County

**State** Same for State

**Country** Same for Country

**Logbook Name** QSO's you log use this name. For example, if operating Field Day, you might use a log called FD 2012.

**Sort Order** QSO's are displayed in this order in the Logbook window.

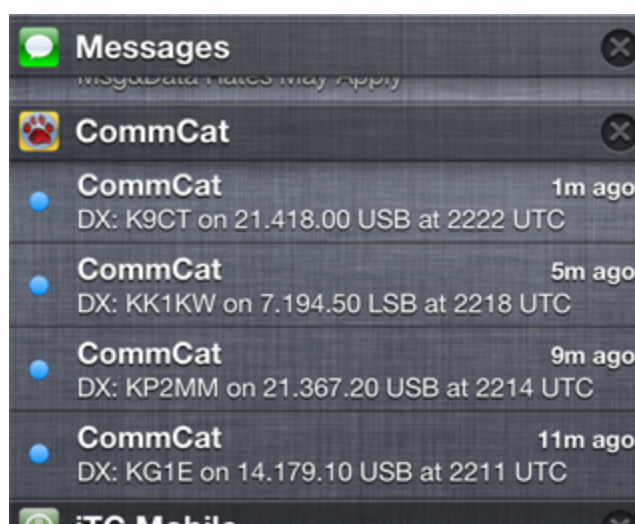
**Tweet Log** When ON, each time you log a contact, a Tweet is sent to the CommCat Twitter account. You can see the stream of Log Tweets at <http://www.MyQSOX.net>.

**Defaults** Values used by default when you start CommCat Mobile. The Favorite Frequency and Favorite Mode settings are used for the frequency memory (M) and the Tuner if you haven't selected a spot. Be sure to enter a Favorite Frequency to the nearest 100 Hz, i.e., 14025.0.

## 2.3 DX Spots

### Spots

**Push Notify** Permit DX Spot Push Notifications to be received from CommCat's DX Spot Manager. You can also control DX Spot Push Notifications by going to iPhone/iPad Settings>Notifications. Scroll down to CommCat. In CommCat Notifications you can control the number of spots to show in the Notification list, the alert style, notification sounds, and badge app icon. DX Spot Push Notifications work all the time, when your iPhone/iPad is in sleep mode, or when you are using another app.

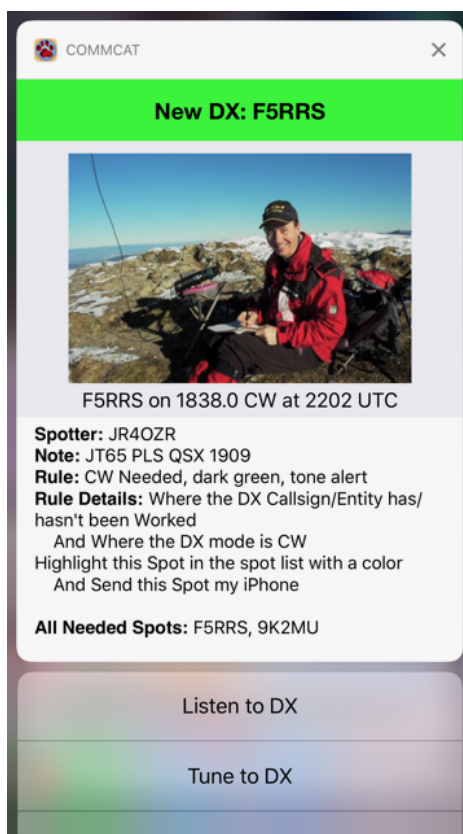


DX Spot Push Notifications can come from two sources.

Push Notifications are created by the DX Spot Manager in CommCat. A Push Notification action can be assigned to any spot rule. When a spot arrives meeting the conditions for that rule, CommCat sends a notification to your iPhone that shows the call, frequency, mode, and time for the spot. The latest spot in a DX Spot Manager spot refresh cycle is sent: if there are additional spots meeting the conditions in the spot list, they are not sent.

### DX Rich Push Notifications

Starting with iOS 10, Apple has provided the ability to send what they call "rich" push notifications. CommCat Mobile supports this new technology, as shown in the screenshot below. Rich Push Notification are only available when using CommCat and the DX Spot Manager.



The New DX bar is painted the same color as used in the CommCat DX Spot manager. The image comes from QRZ.com, which requires an XML subscription. A limited number of photos are provided using the free MyQSLX.net lookup. If an image is not found, CommCat Mobile displays a flag for that entity.

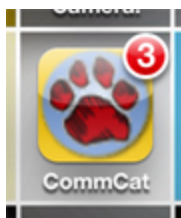
The spot information, Spotter, and Note come from the spot. The Rule and Rule Details come from the DX Spot Manager Rule that you set up.

All Needed Spots is a list of other spots found during that update cycle that were identified as satisfying the Rule.

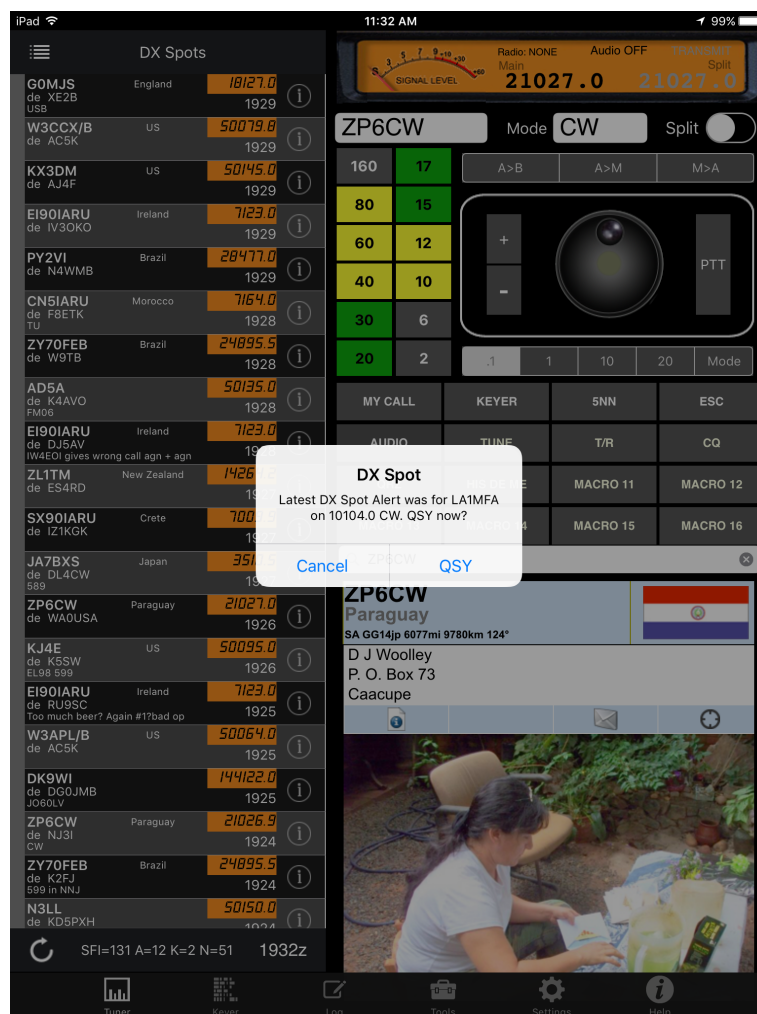
Click Listen to DX to tune your radio to the spot frequency and mode, and connect through VoIP so you can listen. This is a quick way to see if you have a chance of working the DX.

Tune to DX tunes your radio without bringing CommCat Mobile to the foreground.

Rich Push Notifications require iOS 10 or later. If you are using an iPhone 6S or later, use 3D touch to show the contents of the notification. If using an iPad or iPhone older than a 6S, swipe left and select View.



If you are using CommCat Mobile when a DX Spot Push Notification arrives, you will be invited to tune to that spot:



CommCat Mobile's DX Spot Push Notification feature is the most sophisticated DX alert system in existence. No matter where you are or what you are doing, CommCat Mobile will let you know when a critically needed DX station is on the air.

**Spot Auto Refresh** CommCat Mobile spots are refreshed at timed intervals of 1, 3, 5, or 10 minutes, depending on your preference. You can also turn off auto refresh.

Spots are downloaded from a dedicated DX Cluster node running on the MyQSLX.net server.

## Spot Filters

Filters help you find spots of interest. Filters are provided for Bands, Modes, Spotter Continent, and DX Callsign. Conditions define the spots to be filtered, and Actions determine what will happen.

The DX Callsign condition can use asterisk (\*) wildcards to make the filter more general. For example, KH6\* will filter all calls starting with KH6. To filter beacon spots, use \*/B. To look for spots containing the number 6, use \*6\*.

## Actions

**No Filtering** This filter is not used.

**Hide Spots per Conditions** Spots meeting the conditions are hidden.

**Show Spots per Conditions** Spots meeting the conditions are shown, all others are hidden.

**Colored Flag per Conditions** A blue (Band), green (Mode), red (Continent), or yellow (DX Call) marker is placed in the gray bar to the left of spots that meet their respective Conditions.

**DX Call Red per Conditions** The DX call is colored red when the spot meets the conditions.

**Beep for Spots per Conditions** When a spot meets the Conditions, your device beeps. Only one beep is played per spot refresh cycle.

**Alert for Spots per Conditions** When a spot meets the Conditions, an alert appears on your device. Only one alert is shown per spot refresh cycle.

## DX Call Condition notes

Use an asterisk (\*) as a wild card. Enter the call without an asterisk for a literal search. Use W6\* to watch for calls starting with W6. Use \*B to watch for calls ending with B. Use \*A\* to watch for calls that contain an A.

## Filtering Notes

Spot filtering can use a combination of conditions. For example, if you live in North America and need K4C on 20 phone, set the band filter to show only spots on 20, the mode filter to show only phone spots, the spotter continent filter to show spots originating from NA, and the DX Call filter to beep for K4C. Put your iPhone on your nightstand. When it beeps, you will know there is a spot for K4C on 20 phone.



CommCat continues to refresh the spot list when your iPhone is asleep and you are using a Beep action. CommCat Mobile does not continue to download spots you have not set up a beep action.

## 2.4 Remote Control

Control your radio from your iPhone, iPod touch, or iPad. Either the CommCat or QSXer/HRD program is required at the radio end unless you use a direct-connect radio.

The Internet IP, LAN IP and Remote Port settings (see below) are sent automatically to your iPhone if you have enabled Auto Connect in CommCat's Mobile settings, or Auto Connect in QSXer CommCat Mobile settings. These settings are updated each time you start CommCat or QSXer when Auto Connect is enabled.

**Internet IP** The public IP address on the public side of your router. The Internet IP is only used when you are away from home. Access requires port forwarding to be set up in your router. You can get this address from CommCat or QSXer. You can also use a service that tracks your Internet IP, such as <http://dyndns.com>, rather than your own IP.

**LAN IP** The IP address of the computer running CommCat. Used when you are controlling your radio on the same local area network. You can get this address from CommCat or QSXer.

**Remote Port** The port to be used to transfer data (normally 30001).

**Remote Radio** Use No Radio if you don't want to control a radio. Select CommCat A, B, C, or D if you are using CommCat to control your radio. When CommCat Mobile starts and then tunes, it selects the radio you wish to use (A, B, C, or D). Select QSXer if you are using QSXer with Ham Radio Deluxe to control your radio. The direct radio connections require an Ethernet-to-serial adaptor. The Omni VII has an Ethernet port.

<b>None</b>	No radio is connected.
<b>CommCat A</b>	Use radio assigned to A in CommCat.
<b>CommCat B</b>	Use radio assigned to B in CommCat.
<b>CommCat C</b>	Use radio assigned to C in CommCat.
<b>CommCat D</b>	Use radio assigned to D in CommCat.
<b>QSXer</b>	Control your radio from QSXer, or connect to HRD through QSXer
<b>Yaesu FT1000mp</b>	Direct connection to radio through Internet. Requires Internet interface.
<b>Yaesu FT1000 Mark V</b>	Direct connection to radio through Internet. Requires Internet interface.
<b>Ten-Tec Omni VII 1 (RADIO)</b>	Connect as a Radio device. Direct connection to radio through Internet. Requires Internet interface.
<b>Ten-Tec Omni VII 2 (REMOTE)</b>	Connect as a Remote device. Radio has an Ethernet port. CW keying not supported.
<b>Ten-Tec Orion</b>	Direct connection to radio through Internet. Requires Internet interface.
<b>K3/KX3</b>	Direct connection to radio through Internet. Requires Internet interface. CW Keying supported.

**TS-2000 (and later)**

Direct connection to radio through Internet. Requires Internet interface. CW keying supported on later Kenwood radios.

**Radio IP** The LAN IP used by your radio for direct connection.

**Radio Port** The Port used by your radio for direct connection.

**Radio Passcode** The security passcode for your radio (Ten-Tec Omni VII 2 only).

**WinKey IP** The LAN IP used to connect to a serial com port WinKey. It is not possible to use a USB WinKey in this configuration. An Ethernet-to-serial adapter is required.

**WinKey Port** The Port used by the WinKey for direct connection.

**PTT** Select PTT control through CAT, the Glentek interface, or none.

**Direct Connection**

With Direct Connection, CommCat Mobile controls your radio frequency, mode, and PTT without the use of a computer in your shack. However, audio to and from your radio is not provided by the app. The best solution for audio is an old fashioned phone patch which can be called from Skype on your iPad. At least one interface containing a phone patch can be purchased as a kit or as a complete unit from Glentek (dead link as of 12/2015). The Glentek interface also provides an ethernet-to-serial connection to control your radio.

The Ten-Tec Omni VII has a VoIP feature that can be used to transfer two-way audio over the Internet. This interface is not currently supported by CommCat Mobile.

**Internet Interfaces**

An Internet Interface device is required when you want to connect a radio directly to the Internet rather than through a computer. A network interface can also be built into a radio, such as with the Ten-Tec Omni VII. Additions will be made to the list of supported radios. (CommCat is not required when you connect a supported radio directly to the Internet.)

CommCat WF2SL  
WiFi->Serial  
PNCEngineering.com

Can be used in Infrastructure or ad hoc service. PNC customizes each unit for Infrastructure use and for your desired radio Baud rate. Infrastructure mode is recommended. (Ad hoc is useful for direct radio control from CommCat Mobile, and does not require an Internet connection. However, it prevents you from downloading spots, doing callbook look ups, or logging.)

## 2.5 Callbook

Data source you use to look up details about specified stations.

**Source** QRZ is an XML subscription service with a periodic fee. MyQSOX is free, drawing from MyQSOX users and the FCC Database.

**QRZ Password** Enter the password you have set up with QRZ.com.

## 2.6 Macros

The CommCat Mobile Tuner window has 8 rows of 4 macro buttons (32 total). The CW Keyer has 16 macros, shared with the first sixteen in the Tuner. You can use macros to send CW messages and remote commands. CW Macros, Tune, Radio Control, and Rotor control are not available for QSOXer/HRD users.

### Programming Macros

The CommCat Mobile Tuner window has 4 bands of 4 macro buttons (16 total) you can use to send CW messages and custom remote radio commands. CW and Radio Control Macros are not available for QSOXer users.

Macros and their associated button captions are entered in CommCat Mobile Settings in the Macros section.

The first character in a macro indicates the action to be taken.

\$	Literal characters sent as CW
*	Radio Control described below
!	Special commands described below
none	CommCat macro having the same macro number as defined in CommCat CW settings is sent

For example,

\$CQ CQ CQ DE W6HN

causes CommCat to send

CQ CQ CQ DE W6HN

in CW.

**Radio '\*' commands** allow you to send custom control messages to your radio. Radio control macros can include functions such as power on/off, antenna tuner, or antenna select.

These commands are one-way. Radios often send a response to a command, and these return responses are ignored by CommCat. For example, it is not possible to request the frequency for VFO A through the use of a macro.

Many radios use hex numbers for commands. For these radios, enclose each hex number by greater than/less than symbols.

### Icom Example

To tune the Icom IC-7800 Antenna Tuner, the command is 1C-01-03. Each 2-character pair is a hex number. The entire command is:

FE-FE-6A-E0-1C-01-03-FD

These are all hex numbers. You can see the Antenna Tuner command in there, which is taken from the IC-7800 manual. The entire string of hex digits must be sent to the radio.

CommCat Mobile has a special way to represent hex digits. FE should be entered <FE>, and so on. The entire string must be preceded by an asterisk. So the command to start the antenna tuner in the radio would be:

\*<FE><FE><6A><E0><1C><01><03><FD>

Open the macro settings in CommCat Mobile and find an unused macro slot. Enter the name 'A-Tune' in the name box, and the command string into the macro box.

If you wish to add multiple commands in a single macro, simply append one macro to the previous one, without using an asterisk.

### Elecraft K3 Examples

Mike, N6MQL, uses the following radio macros for his K3:

CQ (K3 memory 2)	*SWT31;
APF	*SWH29;
PRE	*SWT24;
ATT	*SWH24;
ANT 1/2	*SWT26;
RIT On/Off	*SWT45;SWT53;
RIT Up	*RU;
RIT Down	*RD;
XFL	*SWT29;
NR	*SWT34;
NB	*SWT33;

RF Gain 100%      \*RG255;  
 ATU Tune          \*SWT19;

### Kenwood TS-2000

Dave, K5OZ, uses these macros for his Kenwood TS-2000:

Ant-1	*AN1;
Ant-2	*AN2;
Ant Tune	*AC111;
Rig On	*PS1;
Rig Off	*PS0;
100W	*PC100;
5W	*PC005;
147.270 MHz (see note)	*FA00147270000;MD4;CN16;
444.100 MHz (see note)	*FA00444100000;MD4;CN16;
444.425 MHz (see note)	*FA00444425000;MD4;CN16;

Note: The macro sets frequency, FM mode, and 114.8 PL tone. The radio is already set for automatic repeater offset.

**Special '!' commands** that can be sent using a macro key include the following:

!KEYER	Opens the iPhone keyboard so you can send CW manually
!ESC	Stops a CW message that is being transmitted
!T/R	Toggles Transmit/Receive (available with QSXer/HRD)
!TUNE	Keys the transmitter while you hold your finger on the macro button
!ROTOR	Turn your station rotor to the DX bearing (not available with QSXer) Tap the ROTOR macro button to open a dialog giving you the opportunity to accept the bearing shown, or to enter a new bearing. You can also use the Maidenhead Grid Square in lieu of a bearing.
!RTR STOP	Stop rotor immediately

Special CW keying characters that can be used in a macro (prefaced by \$):

Char	Result
'*	Your call sign (apostrophe + asterisk)
'X	<u>DX call</u>
@ or 'A	<u>AR</u>
+	<u>AA</u>
'B	<u>BK</u> (apostrophe + B)
- or _	<u>BT</u> (dash or underscore)
'C	<u>CL</u> (apostrophe + C)
'E	"dit space dit" (as in "two bits")
# or 'K	<u>KN</u> (pound sign or apostrophe + K)
[ or 'S	<u>SK</u> (left bracket or apostrophe + S)
] or 'Z	<u>AS</u> (right bracket or apostrophe + Z)
>	Increase the current code speed to the "fast" setting
<	Restore the code speed to normal
%	Insert contest number. This number increments by one after every complete log entry. Set the starting point by using File, Settings, Station, Code in CommCat.

If you have a CommCat Live or CommCat VoIP subscription, you can also send voice macros when operating phone.

## 2.7 Program

**Keyboard Number Accessory** CommCat Mobile adds a numeric key strip to the top of the normal keyboard when this option is enabled.

**PTT Button** CommCat mobile supports the Pryme Bluetooth Speaker Microphone. The microphones have a PTT button. In addition, Pryme offers a standalone PTT button. Select **Enable PTT-Z** to use a Pryme PTT button.



For more information, visit the Pryme website. Be sure to select a device that ends with ZU to ensure it is compatible with Apple devices.

<http://pryme.com>

**PTT-Z Chirp** When enabled, this option provides a short audio chirp when you press the PTT button. The chirp is not sent to your transmitter.

## 2.8 VoIP

The settings in VoIP provide a way to customize several VoIP features.

**Background Enable** CommCat VoIP continues to operate when CommCat Mobile is no longer the active app. This is useful if you want to continue to listen to your radio while using another app. Background Enable must also be set if you want to receive VoIP calls from CommCat when a spot appears that meets the criterion you have set up as a Condition in the DX Spot Manager. Background Enable uses your device battery when CommCat is not active. Do not set Background Enable if you wish to preserve battery life. Background Enable must also be enabled for the Apple Watch CommCat app.

**Allow Incoming Calls** Disable this option to prevent incoming VoIP calls.

**Mute Ringtone** Silence the phone for incoming VoIP calls.

**Mute Mic when listening** This option keeps unwanted audio from being sent to CommCat. When you tap PTT, the mic is unmuted.

**RingTone** Select the Ring Tone you wish to use for incoming VoIP calls. The ring tone "Morse CL" sends the characters CL in Morse code.

**Dedicated AUDIO Button** CommCat VoIP uses the button as it is without any changes. If you aren't using CommCat VoIP, the button starts Skype for 2-way audio. Enter the command with a Skype name or telephone number. !SKYPE:w6hnradio or !SKYPE:+17075551234. If you are using CommCat Live, or QsXer with CommCat VoIP, and have enabled VoIP, tap the AUDIO button to start and end the connection.



### 3 Port Forwarding

CommCat can control your radio through a LAN (Local Area Network) or from the Internet.

If you are using CommCat Mobile in your home, your iPad normally connects to your LAN through a Wi-Fi connection. CommCat or QSXer runs on a computer (or a direct-connected radio, if you are using an Internet Interface) that is connected to the same LAN. Your iPad and computer (or radio) have distinct IP addresses that are connected through a router. The IP address for your computer or radio is used by CommCat Mobile to provide data flow. Since all connections are inside your LAN, port forwarding is not necessary.

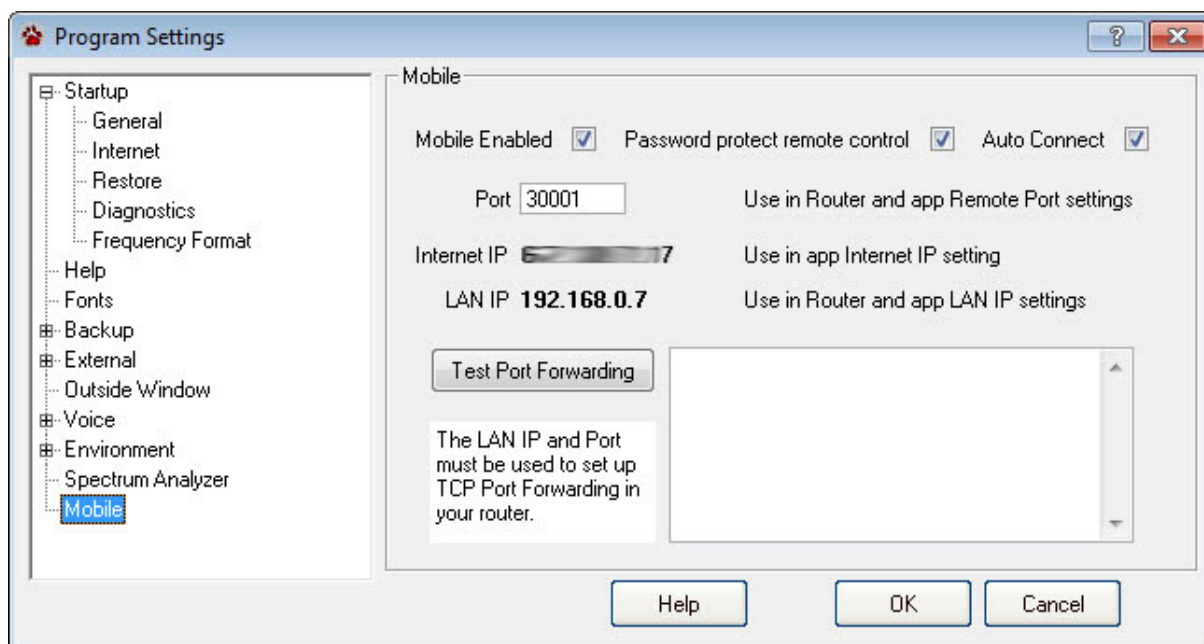
If you use your iPad away from your home LAN connection, you connect to CommCat/QSXer from the Internet. To control your radio from the Internet, you must open a pathway through your router to the computer running CommCat or QSXer. This pathway is opened by using port forwarding. CommCat/QSXer listens on an assigned port for data from your iPad. A router transfers data from one or more computers on your local area network to and from the Internet. Data are sent to specific ports. For example, http data normally uses port 80 or port 8080. The default port for CommCat and QSXer is port 30001. The router must be told which computer on the local area network is using port 30001.

Here are the rules for IP addresses:

- 1) Every device on the internet has at least one IP address. The IP address is a number that is used to identify a device.
- 2) Every IP address is divided up into many ports. When one computer sends data to another computer, it sends it from a port on an IP address to a port on a second IP address.
- 3) A port can only be used by one program at a time.

#### 3.1 Setting up Port Forwarding

CommCat's Mobile settings window File>Settings>Program>Mobile shows the IP address the outside world sees (Internet IP) and the IP address for the computer running CommCat (LAN IP). A Test Connection function is provided so you can see if port forwarding has been set up correctly. You can also enter a static connection to a dynamic DNS host such as dyndns.com.



## Configure Port Forwarding

### Netgear

Instructions for RP614, MR814, WGR101, WGR614, WGT624, WGT634U, WGU624, WGM124, or WPN824

These routers do port forwarding by assigning port numbers to a "service" that is associated with the application you want to run.

To let CommCat Use Port Forwarding:

### Port Forwarding

Service Name		Server IP Address	
SERVICES ▼		192	168 . 0
			Add

#	Service Name	Start Port	End Port	Server IP Address
1	Rig	30001	30001	192.168.0.4

1. Type the router's address in an Internet browser's address bar. (By default the router's address is 192.168.0.1). The Setup Wizard appears.
2. Enter the router's username and password.

3. Under Advanced, click Port Forwarding on the left menu bar. A Port Forwarding Screen appears (varies slightly by Router).
4. Click Add Custom Service.
5. Enter 30001 in an unused Start Port box.
6. Enter the same number in End Port.
7. Enter any name you choose for the service, such as CommCat.
8. Click Apply
9. Click Logout to exit from router settings.

## Linksys

Port Range					
Application	Start	End	Protocol	IP Address	Enable
Rig	30001	to 30001	TCP	192.168.1.150	<input checked="" type="checkbox"/>

1. Type the router's address in an Internet browser's address bar. (By default the router's address is 192.168.0.1). The Setup Wizard appears.
2. Enter the router's username and password.
3. Once logged in, select the Applications and Gaming tab at the top of the page.
4. Select Port Range Forwarding.
5. In the top row first box, put the name of the service that you are forwarding the port for, e.g. Rig
6. In the second and third box, put 30001 and select TCP in the drop down menu.
7. Under IP address, enter the IP for the computer running CommCat.
8. Check enable and save settings.

## Important Port Forwarding Note

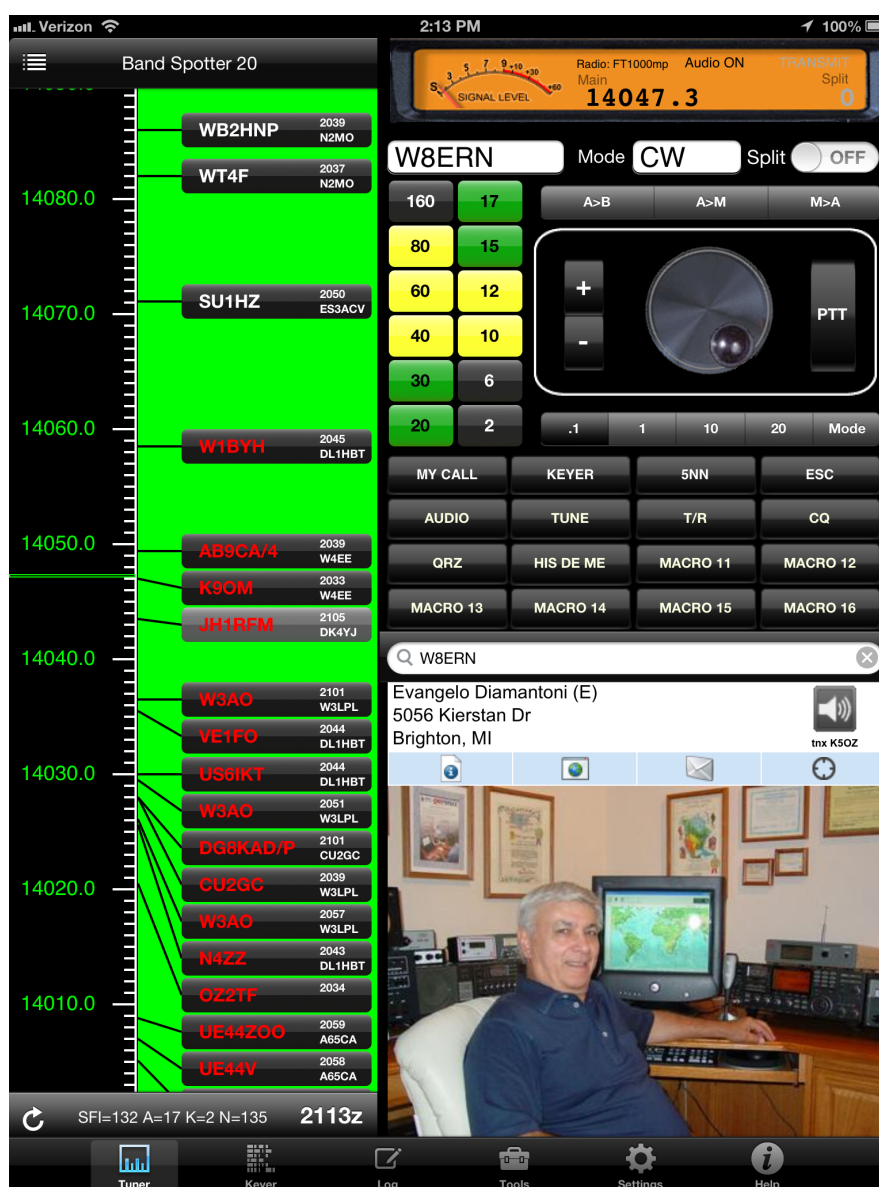
Some Internet Service Providers supply a Modem that already contains a single-port router. If you use a second router with such a device, port forwarding will not work without extra settings. Here is an article on the web that explains the 2-router problem. If port forwarding doesn't appear to work for you, please read this article.

<http://boards.portforward.com/viewtopic.php?f=6&t=158>

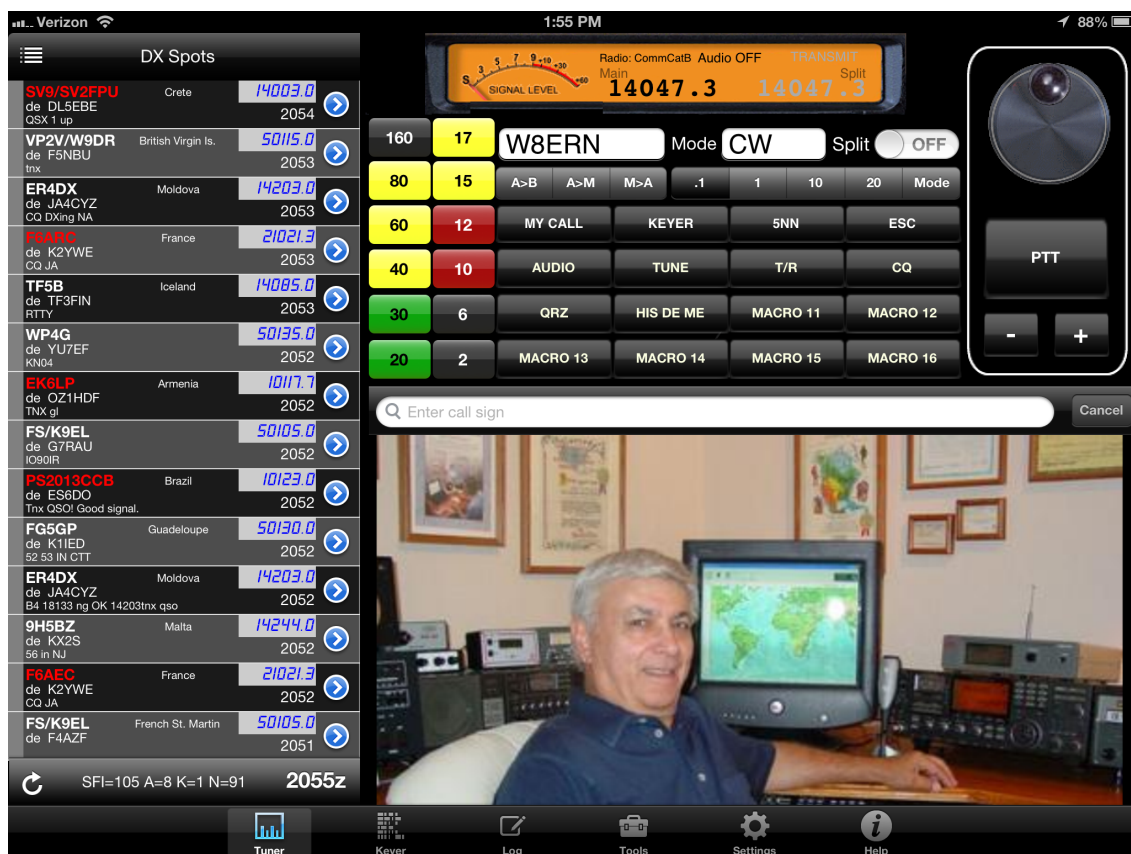
## 4 Navigation

To navigate from one view to another, click a tab button at the bottom of the window you are viewing.

CommCat Mobile can be used in either Portrait or Landscape orientations.



Portrait



Landscape

## 4.1 Tuner

The CommCat Mobile Tuner window provides a way to control your radio and display one of several tuning aids. The Band Spotter is shown below in the left column.



### 1. VoIP Status

VoIP status can be Audio ON, Trying, and Audio OFF. Your Live account must be set up for VoIP. Please contact CommCat technical support for assistance.

### 2. Frequency selector

Copy VFO A to VFO B, VFO A to M (Memory) or M to VFO A.

### 3. Tuning and PTT

Tune by rotating the knob or by using the +/- buttons. The tuning steps are set by the switches below. Tap and hold the PTT button to transmit. There is also a way to program a macro button to provide a toggle T/R switch. See the Macro topic of Help.

#### **4. Tuning sensitivity**

Set the tuning step size to 100 Hz, 1 kHz, 10 kHz or 20 kHz, or set the Mode with the tuning knob.

#### **5. Macro switches**

See the Macro topic of Help to learn how to program the 32 macros. You can use them for VoIP control, CW messages, rotator control, or rig control.

#### **6. Callbook**

Shows the callbook page for a selected call. You can use the free MyQSLX callbook, or the subscription QRZ XML service. See settings.

Audio clips are available for many DX stations. When a clip is found on the MyQSLX server, a speaker icon appears. Tap the speaker icon to listen to the audio clip.

The grid square and distances are computed from the relative latitudes and longitudes of your location and the DX location. If the DX latitude and longitude are not found, the grid square is estimated and will most likely not be exact.

#### **7. Additional callbook functions**

View the QRZ Bio, personal home page, send email to the DX station, or view their location on a map.

#### **8. Spot toolbar**

Refresh the spot list, view the current sun spot information, or check the UTC time. The spot list can also be refreshed automatically, see settings.

#### **9. Band Spotter**

The Band Spotter view is one of several tuning aids that can be displayed on the left side of the Tuner window (see below). The Band Spotter shows recent spots on a tuning scale. Tap a spot to tune to that spot's frequency and mode. The background color of the spots show their age. Light gray shows that a spot was reported in the last five minutes, gray within 10 minutes, and black older than 10 minutes. The text color in each spot reflects filtering rules that have been set up, while colored flags on the left end of a spot are also created by a rule.

#### **10. Radio status and S-meter**

Shows the Main (VFO A), Sub (VFO B), selected radio, transmit status and signal strength. The Sub frequency is disabled when you are not in split. You can enter a frequency directly by tapping the Main or Sub frequency and using the keyboard.

## 11. Option List

Provides a list of alternate tuning aids that can be displayed in the left column (see below).

### Tuning Notes for Remote Control

Remote Control requires that: 1) CommCat logging program, or, 2) QSXer be running on your home computer and controlling to your radio, or, 3) you are using a supported direct connection radio. Make sure CommCat controls your radio properly before attempting to use remote control. If you are using HRD, QSXer sends remote commands to HRD, which then controls your radio.

When you rotate the CommCat Mobile tuning knob in the Tuner window, CommCat Mobile sends frequency, split, and mode data to your home computer running CommCat or QSXer, or directly to your radio. When you lift your finger, your operating status is sent to your home page on the MyQsx server. The Tuning Knob flashes to confirm the MyQsx data exchange.

When you start the app, the current radio frequency and mode are retrieved from CommCat. Tap the Tuner button in the tab bar to open the Tuner window to display the radio's frequency and mode. Any changes made to your radio through its controls or from CommCat or HRD are sent to CommCat Mobile. Note that QSXer is not able to read the status of HRD split, so this information is not sent back to CommCat Mobile.

If something is wrong with the connection from CommCat Mobile to CommCat or QSXer, you will see an alert message in CommCat Mobile. This alert suggests that you check the IP addresses entered into CommCat Mobile settings, and confirm that CommCat or QSXer is running.

You can look at your MyQsx home page to learn more about what is being sent to the MyQsx server:

- Free MyQsx account: <http://myqsx.net/q.php?call=yourcall>
- CommCat Live account: <http://yourcall.myqsx.net>

Navigate to one or the other links, above, and you will see the most recent frequency and mode sent from CommCat Mobile to the MyQsx server.


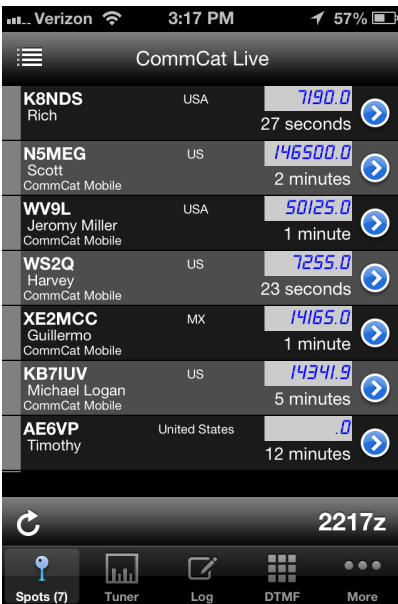
To modify data on a QSXer home page, use the free QSXer application available from the QSXer web site: <http://www.qsxer.com>.

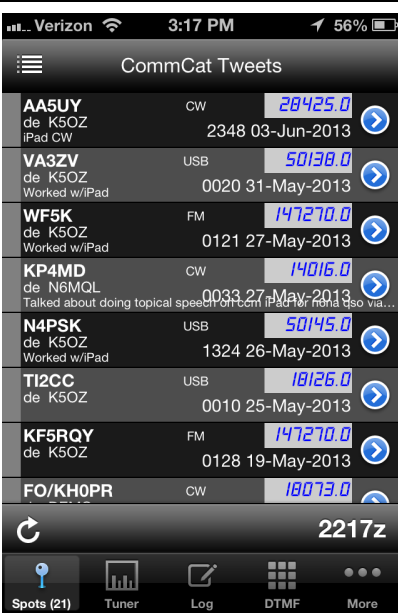
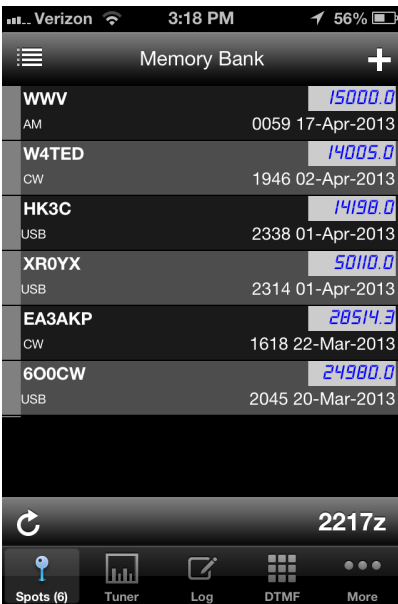
To modify data on a Live home page, open the Live settings window from CommCat.


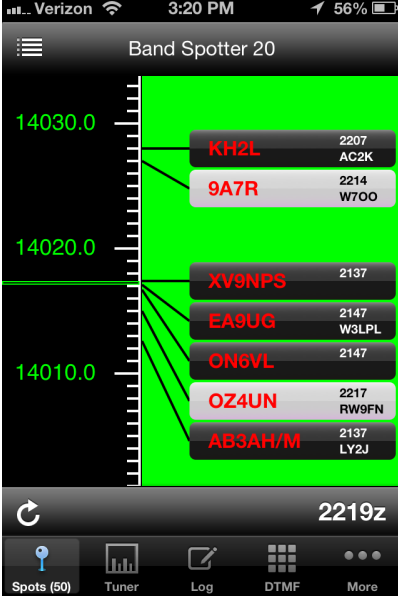
### Option List

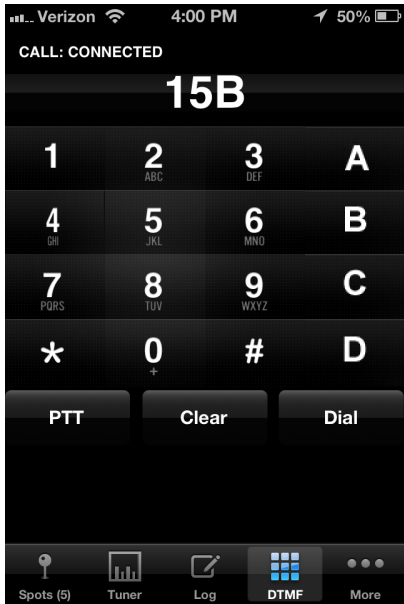


Select the view for this part of the Tuner window. Tap the button to open the option list. (The images show the equivalent iPhone view.) The selections include:

<p>MyQSOX DX Spots</p>		<p>The DX Spot List is the default view. It shows the latest 50 spots from the MyQSOX DX Cluster. See DX Spot Settings for details on how to set filters.</p>
<p>CommCat Live Spots</p>		<p>This is a handy spot list that can be used to contact other CommCat Live and QSOXer users. The time since the station's last update is shown below their current frequency. Tap a cell to tune your radio to that frequency and show the Tuner window. Double-tap to tune without going to the Tuner window. Tap the disclosure button to open the callbook page for that station.</p>

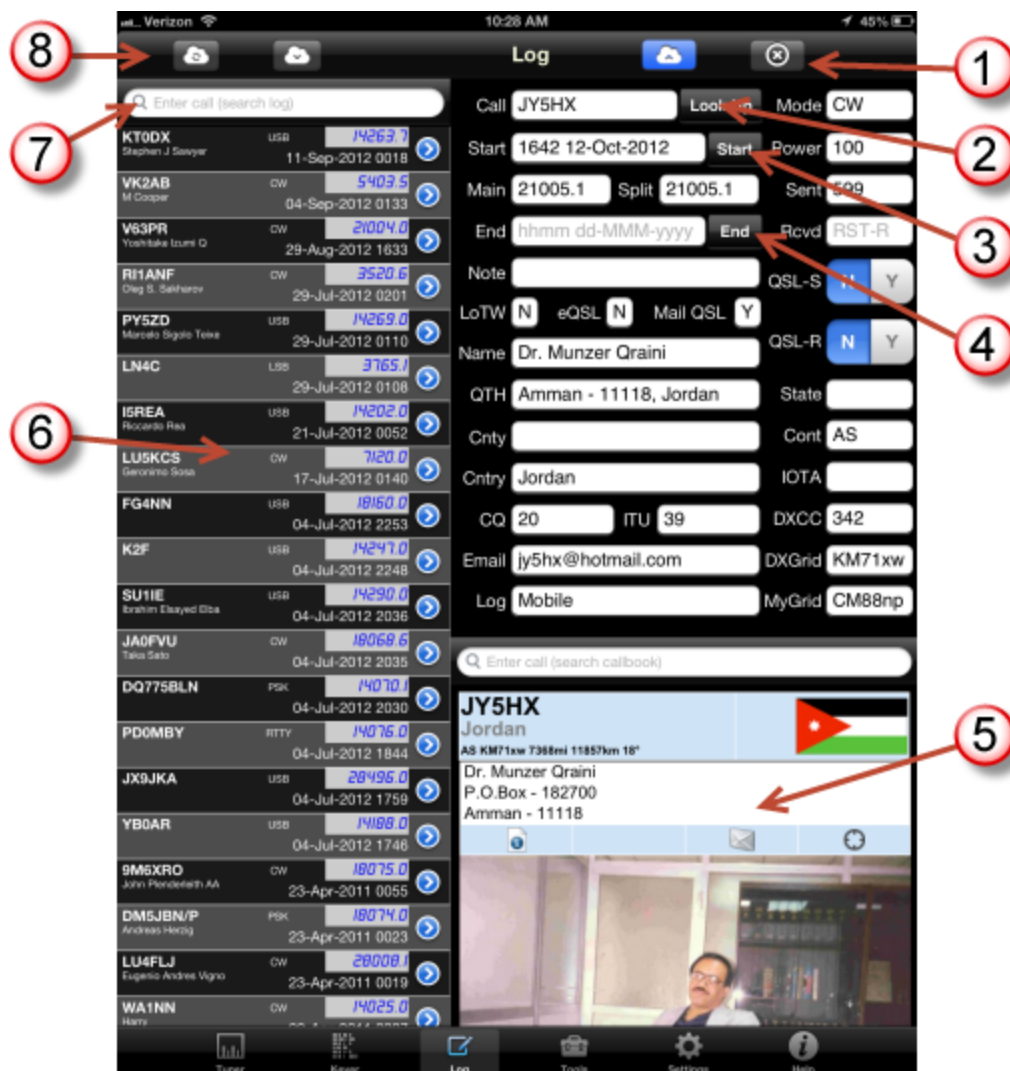
CommCat Tweets		<p>CommCat and CommCat Mobile users can send a Tweet to the CommCat Twitter account each time a QSO is logged. This list shows the current logging activity of CommCat users.</p>
Memory Bank		<p>The Memory Bank provide a place to store favorite frequencies and modes. Tap a bar to tune to that frequency. To add a current frequency and mode to your list, tap the + button. To remove a bar, swipe the bar to the left and tap Delete.</p>

MyQSX Audio Clips		<p>CommCat Live users can record audio clips and upload them to the MyQSX web site. The most recent clips are shown on the Audio Clip List. Tap the Play button to listen to an audio clip. The number of times a clip has been played is shown.</p>
MyQSX Audio Clips (DX)		<p>Same as above, showing only non-US clips.</p>
Band Spotter		<p>The Band Spotter view shows current DX Spots on a tuning scale. Tap a spot to tune there. The current frequency is shown by the green lines. The spot bars are light gray, gray, and black, showing a relative indication of how old the spot is. Light gray is under five minutes, gray is 5-10 minutes, and black is longer than 10 minutes. As you scroll to the upper or lower band limit you will see red buttons with arrows. Tap the button to go to the next higher or lower band.</p>

DTMF Keypad		<p>The DTMF Keypad can be used for remote control purposes, such as with a repeater. The DTMF tones are repeated by CommCat using the VoIP channel. The DTMF Keypad requires CommCat and CommCat Live.</p> <p>The current audio connection status is not shown on the iPad view.</p> <p>Tap and hold the PTT button to have CommCat transmit the tones.</p> <p>The most recent dialing sequence is shown below the call status. Tap Dial to resend this sequence. The sequence you dial is retained by CommCat Mobile for the next time you need it.</p>
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## 4.2 Log

Enter or edit the details of a contact in the QSO window, view your logbook, and show the callbook page for a selected contact. Changes you make are synchronized automatically in your CommCat station log.



### 1. Upload/Clear this contact

Tap the blue cloud to upload this contact to your Cloud log on MyQSX.net, or tap the clear button to clear all information about this contact.. CommCat Mobile tells you that the upload was successful. You can also edit and save existing contacts from your log.

### 2. Look up this call in callbook

Fill the fields from the callbook by tapping Look Up.

### 3. Set starting time for this contact

The current time is shown in the Start field when you open the Log window for a new contact. Tap Start to update this time to the present time. If you wish to enter the time manually using the iPad keyboard, tap the start time field. The keyboard can be used by

tapping any text field in the Log window. If you enter the time and date manually, use the format hhmm dd-MMM-yyyy.

#### **4. Set ending time for this contact**

Tap to enter the ending time for this QSO.

#### **5. Callbook page**

Callbook page for the selected contact. See details about the callbook window in the Tuner topic.

#### **6. Logbook listing**

The 50 most recent contacts from your MyQSOX log. Tap a contact to show the contact details in the log window. Tap two times to view the contact in the log window and open the callbook page for that contact. Tap the blue disclosure button to show the callbook view.

#### **7. Logbook search**

Search for specific contacts using the search bar. Use the asterisk (\*) wild card as a filter. For example, search for K\* to find all calls starting with the letter K.

#### **8. Logbook tools**

Refresh the logbook listing, or view your entire logbook on the MyQSOX site using a browser (see below).

#### **Accessing your MyQSOX log from the CommCat Mobile browser.**

You can access your online log by tapping the cloud download icon at the top of the logbook list.

The MyQSOX log provides a number of features:

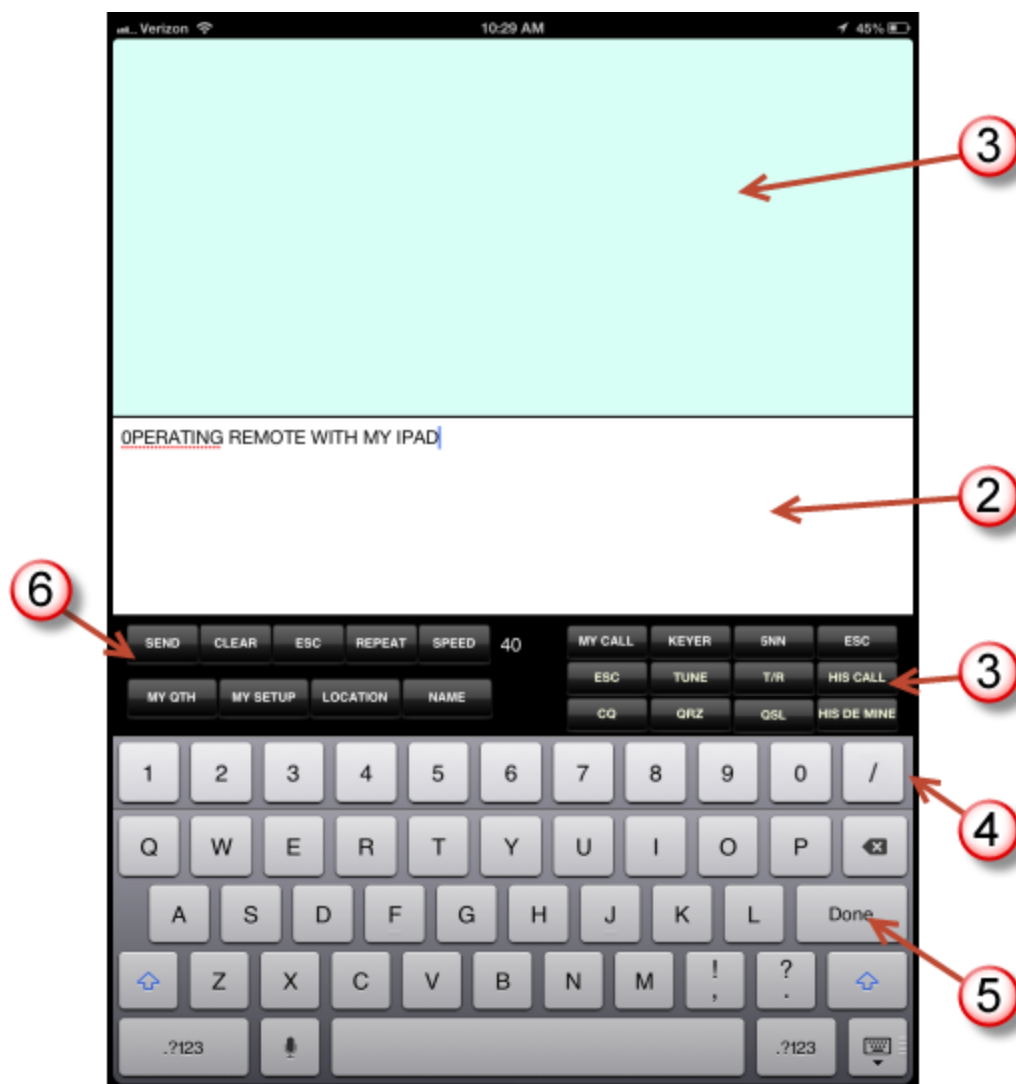
- Display your log in normal or extended modes.
- Change the order of contacts by clicking any column header.
- Search for contacts using any field.
- Print your log.
- Upload your station log so you can view and search it from CommCat Mobile.
- Download your log in ADIF, XML, or Excel formats.
- Edit your log online.
- Delete and add contacts.
- View graphical statistics for your log.

Click Help at the bottom of the MyQSOX log main window for additional assistance.

Here is a list of the data fields contained in the logbook:

Logname  
DX Call  
My Call  
Time Start  
Time End  
Main Frequency  
Split Frequency  
Band  
Mode  
RST Sent  
RST Received  
QSL Sent  
QSL Received  
Note  
DX Name  
DX QTH  
DX Country  
DX Continent  
DX E-mail  
DX Grid Square  
DX DXCC Reference Number  
DX CQ Zone  
DX ITU Zone  
My Latitude  
My Longitude  
My Grid Square  
My City  
My County  
My State  
My Country  
My Transmitter  
My Antenna  
My Power

## 4.3 Keyer



### 1. Incoming text

Text sent from CommCat. If you are using a WinKey or CommCat's internal keyer, the sent characters show here. If you are using an Elecraft K3 or KX3, the decoded received text from the radio is shown.

### 2. Outgoing text

### 3. Macros

CommCat Mobile provides 16 macros that can be programmed for CW messages, rotor control, or rig control. Macros 12-16 show on the macro bar to the left.



#### **4. Numeric bar**

#### **5. Done button**

Tap the Done button (or keyboard dismiss button) to remove the keyboard and expose the tabbed navigation bar.

#### **6. CW command bar**

Tap Send to send the contents of the type ahead buffer, Clear to clear the incoming and outgoing text panels, ESC to immediately halt text being sent, repeat to repeat the contents of the outgoing text panel, and Speed to change the CW speed.

### **4.4 Tools**

Various aids can be found in the Tools menu.

#### **DX News**

DX News shows the latest DX News from the ARRL.

#### **UTC Clock**

The UTC Clock shows the current UTC time in addition to local time in 12- and 24-hour formats. You can change the color of the display, and select bright or dim.

#### **Today's Sun**

The current sun conditions are shown.

#### **Macro Utilities**

Back up your macros to the cloud, or restore them. This feature allows you to share macros among all your iOS mobile devices. A third option deletes all macros.

## 5 VoIP or Skype

Two-way audio is required to operate your radio remotely. Audio can be provided within CommCat Mobile and CommCat and QSXer using VoIP (Voice over IP), or by using two Skype Accounts.

To use CommCat Mobile VoIP you must have a CommCat Live account or CommCat VoIP subscription on the MyQsX server. CommCat Live and CommCat VoIP are separate subscription services. Once you have a Live account, contact CommCat support to have VoIP enabled in your account. If using QsXer, your VoIP account will be set up once you have subscribed.

If you choose not to sign up for a Live account, you can continue to use Skype as the means to send and receive audio.

Here are the advantages when using CommCat Mobile VoIP:

1. Simple operation, tap a button in the CommCat Mobile Tuner window to start or end a connection.
2. Simple setup.
3. Uses industry standard "SIP" technology for greater flexibility.

Skype is a free Internet service you can use to provide 2-way audio to your radio.

Learn more by visiting the Skype site: <http://www.skype.com/intl/en-us/home>

Two Skype accounts are required, one running on your home computer and the other running on your

### 5.1 CommCat VoIP

Once you have a CommCat Live account on MyQsX, contact CommCat support and ask that VoIP be enabled. If you have subscribed to CommCat VoIP and are using QsXer, your account is set up automatically.

Here is a link to a video showing how to set up CommCat VoIP.

Receive audio can be provided using a cable connected from the headphone connector on your radio to the line input connector on your sound card. If you are using an interface device, such as a Signalink or a RigBlaster from West Mountain Radio, you can use that connection to provide receive audio.

Transmit audio to your mic can be supplied from your sound card through an isolation transformer, or by using one of the devices listed above.

A button is normally provided in the CommCat Mobile macro bank named AUDIO. If you have enabled VoIP, tap the AUDIO button to connect to CommCat. Tap it again to disconnect.

If you do not have a button named AUDIO, here is how to add it.

1. Create a new macro in CommCat Mobile settings and name it AUDIO.
2. In the Macro line, enter !SKYPE

If VoIP is detected, the AUDIO button makes the connection. If VoIP is not detected, CommCat Mobile closes and Skype is opened, allowing you to make a call. See the Macros topic in Settings for more information on using the Skype macro.

If you receive a message that the number you called is unavailable or busy, tap AUDIO and try again.

VoIP settings in CommCat are detailed in CommCat Help..

## 5.2 Skype Connections and Settings

### Connections

Receive audio can be provided using a cable connected from the headphone connector on your radio to the line input connector on your sound card. If you are using an interface device, such as a Signalink or a RigBlaster from West Mountain Radio, you can use that connection to provide receive audio.

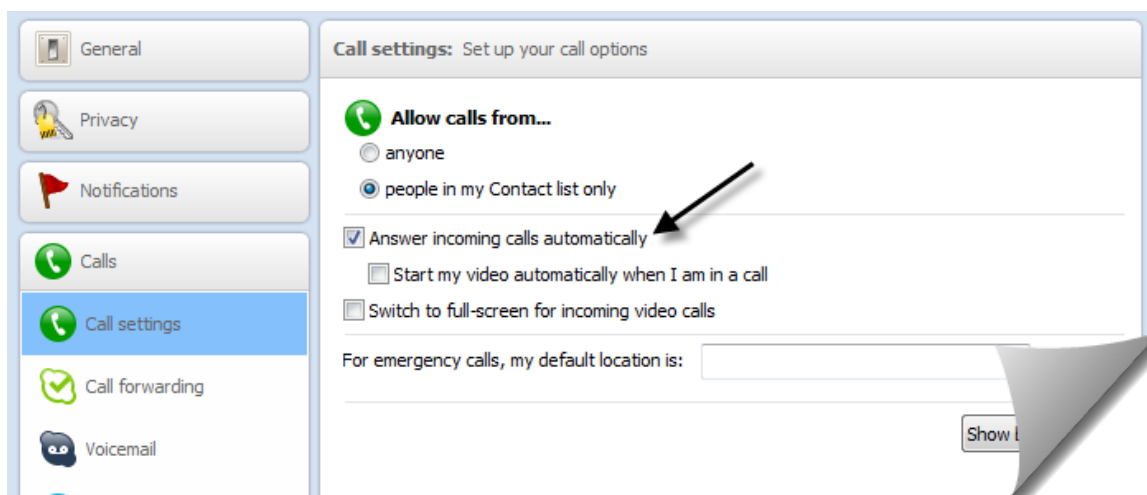
Transmit audio to your mic can be supplied from your sound card through an isolation transformer, or by using one of the devices listed above.

Note that if you are using CommCat Mobile for CW operation, audio to your mic is not required. (CW operation is not supported with QSKer/HRD.)

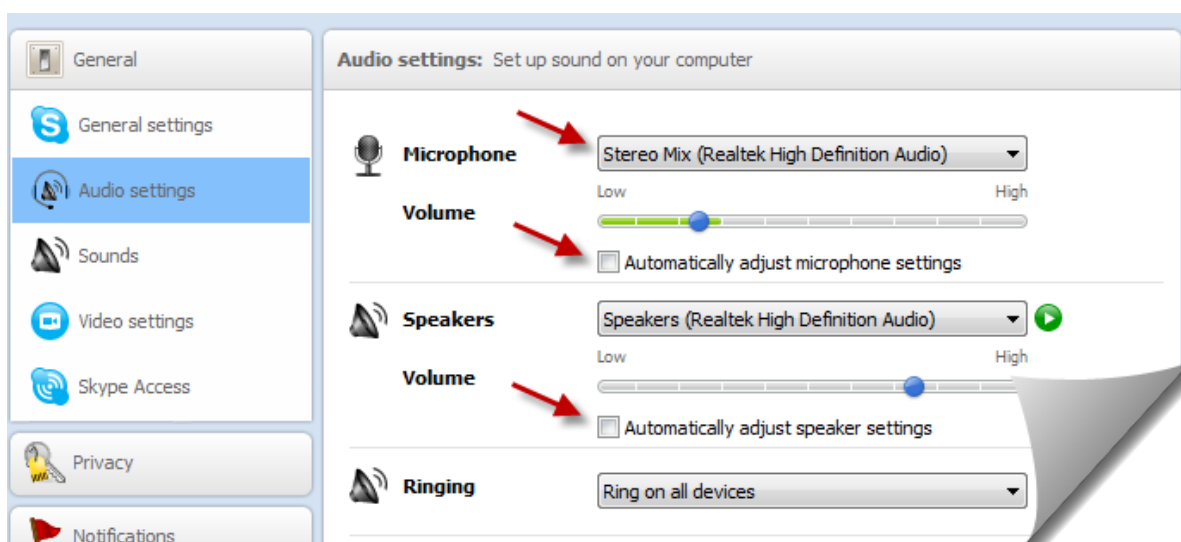
### Skype Settings

Two Skype accounts are required, one running on your radio computer and the other on your iPhone.

Set the radio Skype to auto answer calls. This way you can connect by calling your radio Skype from your iPad.



In the radio Skype, set the microphone to the source you are using. Remove the checks for automatic adjustments.



Connect your radio to a dummy load for the following tests. Make a Test Call from the radio Skype. The voice announcement from Skype should trigger the VOX in your radio, and the sound sent from your receiver should play back. (You can also use the PTT macro in CommCat Mobile rather than VOX.)

If you are operating CW, or just listening, mute the Skype mic. Without this step, Skype's AGC will interfere with incoming audio.

## 5.3 Skype Use

Start Skype on your radio computer.

---

Start CommCat or QSXer and make sure it is controlling your radio properly and that the port/IP settings are correct.

Start Skype on your iPad and call the radio Skype account. You should hear your radio audio.

Click the Home button on your iPad to send Skype to the background. You should continue to hear your radio audio.

Start CommCat Mobile on your iPad and enjoy remote operation.

Note that if you are using the Macros in the CommCat Tuner window to operate CW, audio to your radio's microphone is not required.

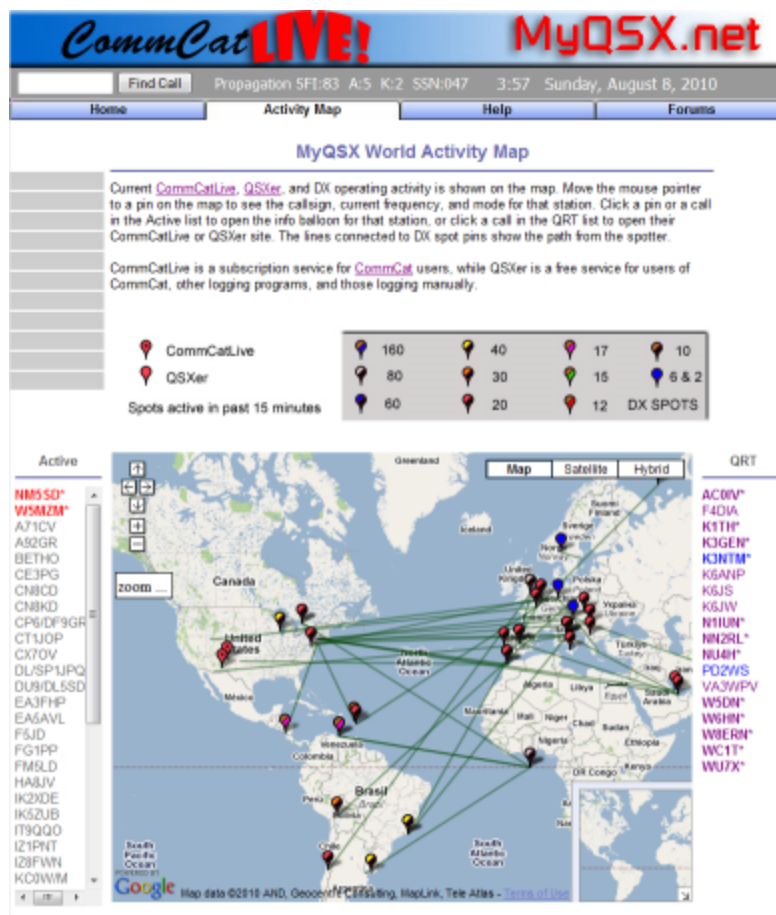
*You can use Mute in the iPad Skype app to turn off the iPhone mic. This step is recommended when you are operating CW or just listening.*

## 6 MyQSX

MyQSX.net is a site for radio amateurs who want to share their current operating activity. The site hosts two types of accounts: CommCat Live for CommCat and CommCat Mobile users, and QSXer for CommCat, CommCat Mobile, and other logging programs. CommCat Live is a subscription service that provides extended features, while QSXer is a free account that provides fewer features..

In addition to the Live and QSXer accounts, a DX Cluster runs on the MyQSX server to feed DX spots, and a forum is available for providing help and information about COMMSOFT products.

### 6.1 World Activity Map



Current CommCat Mobile, CommCatLive, QSXer, and DX operating activity is shown on the map. Move the mouse pointer to a pin on the map to see the callsign, current frequency, and mode for that station. Click a pin or a call in the Active list to open the info balloon for that station, or click a call in the QRT list to open their CommCatLive or QSXer site. The lines connected to DX spot pins show the path from the spotter.

CommCatLive is a subscription service for CommCat users, while QSXer is a free service for users of CommCat, CommCat Mobile, other logging programs, and those logging manually.

## 6.2 QSXer

The screenshot shows the CommCat QSXer website interface for user W8ERN. At the top, the header includes the 'CommCat QSXer' logo and the call sign 'W8ERN'. Below the header, a navigation bar displays 'Find Call', 'Propagation SFI:83 A:5 K:2 SSN:047', and the time '3:59 Sunday, August 8, 2010'.

The main content area is divided into several sections:

- Not Active:** A status indicator at the top left.
- User Profile:** A box for user 'Angelo' from 'Brighton, Livingston, MI, USA'. It includes a 'DXCC Entity Number: 291', 'Grid Square: EN82dm', and a 'Last QSXer Note'. The 'My Home Page' is listed as 'http://w8ern.myqsx.net'. It also shows 'UTC time: 2259' and 'W8ERN local time: 1859'. Equipment details include 'Antenna: 80M /40M Inv Vee - 20M / 6M 3 EL SteppIR', 'Rig: IC756 ProII / IC781 / SIG1 MILSPEC 1030', and 'Program: CommCat 4.0.11'. A 'Click flag for more' button with an American flag icon is present, along with a link to 'Go to MyQSX Activity Map'.
- About W8ERN:** A section titled 'My BIO' containing a personal bio: 'Got interested in Electronics at the age of 12 and by the age of 15 in 1949 I acquired my call W8ERN and then later acquired my Extra Class license.' and a paragraph: 'As an active ham operator, I enjoy all facets of the hobby which includes the Digital modes, however I spend most of my time'.
- s-meter:** A graph titled 'Updated more than one hour ago' showing signal strength over time. The y-axis is labeled '+60', '+40', '+20', '9', '6', '3', '0'. The x-axis is labeled 'time (seconds)' with values '-45', '-30', '-15', '0'. A line graph shows a peak around -45 seconds. A 'PRINT' button is located below the graph. A note states: 'The QSXer S-Meter shows 60-seconds of peak readings from W8ERN. Ask W8ERN to update the graph to see the latest readings.'
- Send e-mail to W8ERN:** A section with a form to send an email. It includes fields for 'My e-mail address' and 'My callsign', a 'Message to W8ERN' text area, and a 'Send e-mail to W8ERN' button.

When you sign up for a free MyQSX account, your activity is shown on a QSXer Home Page.

CommCat QSXer is a freeware application that shows your current operating status on a world map and gives you a personal web site.

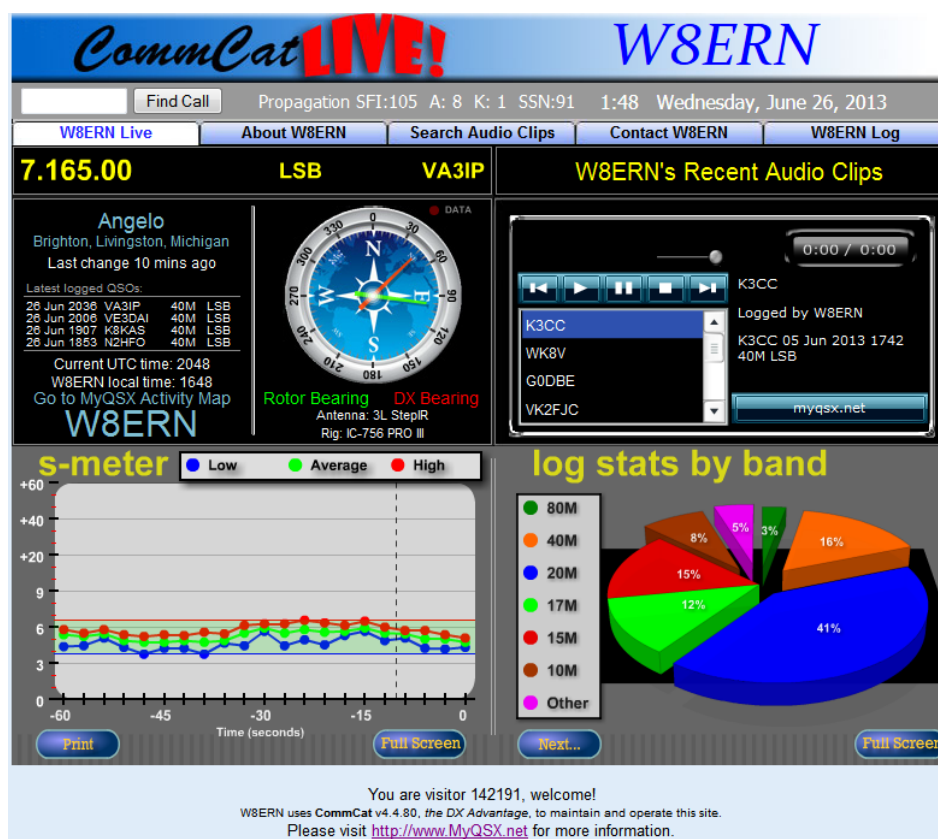
Your call, current frequency, mode, name, location, and a short note appear on the MyQSX Activity Map web site.

- Show your operating status on the MyQSX Activity Map.
- Works with CommCat, TRX Manager, Ham Radio Deluxe, Logic, and HAM-LOG.

- Easy manual entry of frequency and mode if you are not using a program on the supported list.
- Add a short note or greeting.
- Create your own web site with personal info, bio, and an S-meter graph.
- Visitors can send you e-mail through a form on your site that doesn't expose your e-mail address.
- Hide QSXer in the System Tray.
- Comprehensive online help provided.
- VoIP through a CommCat VoIP subscription.

Download the free QSXer management program from <http://qsxer.com>. Use your CommCat Mobile Registration Code to register QSXer. With QSXer you can add and edit your biography and make other changes to your site.

## 6.3 CommCat Live



CommCat Live, an add-on for CommCat, provides a personal Internet web site others can visit to watch as you operate. Your operating conditions are constantly updated every few seconds as you work DX, record audio clips and log contacts. CommCat Live is filled with features to give you an exciting presence on the web unlike any other.



CommCat Live is a subscription service, unlike QSXer which is free.

- Operate your own personal CommCat Live web site.
- Show your operating status including frequency, beam heading, log, and s-meter as they change.
- Record and upload audio clips of stations you hear or work.
- Stream your audio to the net so others can hear what you hear.
- Bring order to your pile ups and nets by using the interactive CommCat List.
- Create a bio page with text, a photo album, and Google map showing your location.
- Receive e-mail sent through your web-based e-mail page.
- Sync your radio to the frequencies of other CommCat Live users.
- Participate in a chat room for CommCat Live users.
- Archive your log on your web site for safe keeping.
- Track CommCat Live user's operating activities with your cell phone.
- Display your log on your site for visitors to browse and search.

Your web site is located on a server that has been set up especially for this application. The server domain is <http://www.myQSX.com> and the Live sites are hosted on <http://www.myQSX.net>. Each user's site has a sub domain that includes their call sign. For example, the site for W6HN is <http://w6hn.myQSX.net>.

## 6.4 Logbook

Your CommCat Mobile logbook is hosted on the MyQSX server. The logbook can hold as many QSO's as you wish, although only the most recent 50 contacts show in CommCat Mobile. You can use the CommCat Mobile search function to look for contacts no matter where they are in your log.

See the Logbook topic in Navigation to learn more about your online log.

## 6.5 QSXer - CommCat Live Comparison

Web Features	CommCat Live	CommCat QSXer
<b>Data</b>		
Activity (Frequency, Mode) refresh	6 seconds	60 seconds
Time since last updated refresh	6 seconds	NA
Latest logged QSO's	4	NA
Log stats graph	Yes	NA
Local and UTC Time	Yes	Yes
S-meter refresh	3 seconds	60 seconds
S-meter reading	Max, average, min	Max
DX Bearing refresh	6 seconds	NA

Web Features	CommCat Live	CommCat QSXer
Rotor Bearing refresh	6 seconds	NA
Log contacts with CommCat Mobile	Yes	Yes
Public online log with search capability	Yes	NA
Spot Push Notifications	Yes	Yes
Audio		
Audio player	Yes	NA
Upload audio clips	Unlimited	NA
Internal VoIP	Yes	Requires 2 Skype accounts or CommCat VoIP subscription
About		
Bio	Yes	Yes
Photo slide show	Unlimited	NA
Google Map	Yes	NA
Contact	Yes	NA
Secure e-mail	Yes	Yes
Instant Contact List	Yes	NA
CommCat		
Internal VoIP for 2-way audio	Yes	Requires 2 Skype accounts
Live Chat room	Yes	NA
Synchronize radio to Live user	Yes	NA
View Live Info panel and S-meter	Yes	NA
Active user list	Yes	NA
Google Calendar link	Yes	NA
Back up log on web site	Yes	NA
HTML Editor for Live Bio	Yes	NA
Twitter interface	Yes	NA
Access MyQsx log from any browser	Yes	Yes
Automatically upload new QSO's to MyQsx log from CommCat	Yes	N/A
Compatibility	CommCat, CommCat Mobile	CommCat, CommCat Mobile, TRX Manager, Ham Radio Deluxe, Logic, HAM-LOG, manual logging..
Price	CommCat (\$49.95 one time, free updates) plus Live Subscription (starting at \$30 for first year)	Free (subscription for VoIP)

## 7 MyQsx Logbook

The MyQsx Log provides a home for your CommCat Mobile QSO log on the MyQsx.net site. Your logged contacts are sent to your MyQsx Log automatically via the Internet. You can also upload logs created with any logging software using the ADIF format. There is no limit to the number of log entries you can have, and access to your log is free.

Here are the features provided with the MyQsx Log:

- Use any browser to view your log
- Automatic upload of contacts from CommCat Mobile
- ADIF upload of logs with no limits
- Edit and delete contact info
- Sort and filter contacts
- Search for contacts by any field
- Download contacts using ADIF, Excel spreadsheet, or XML
- Print logs
- View graphs of log statistics
- View major award status (coming soon)

You can visit your log by navigating to <http://MyQsx.net/mylog>

### 7.1 CommCat Mobile Log

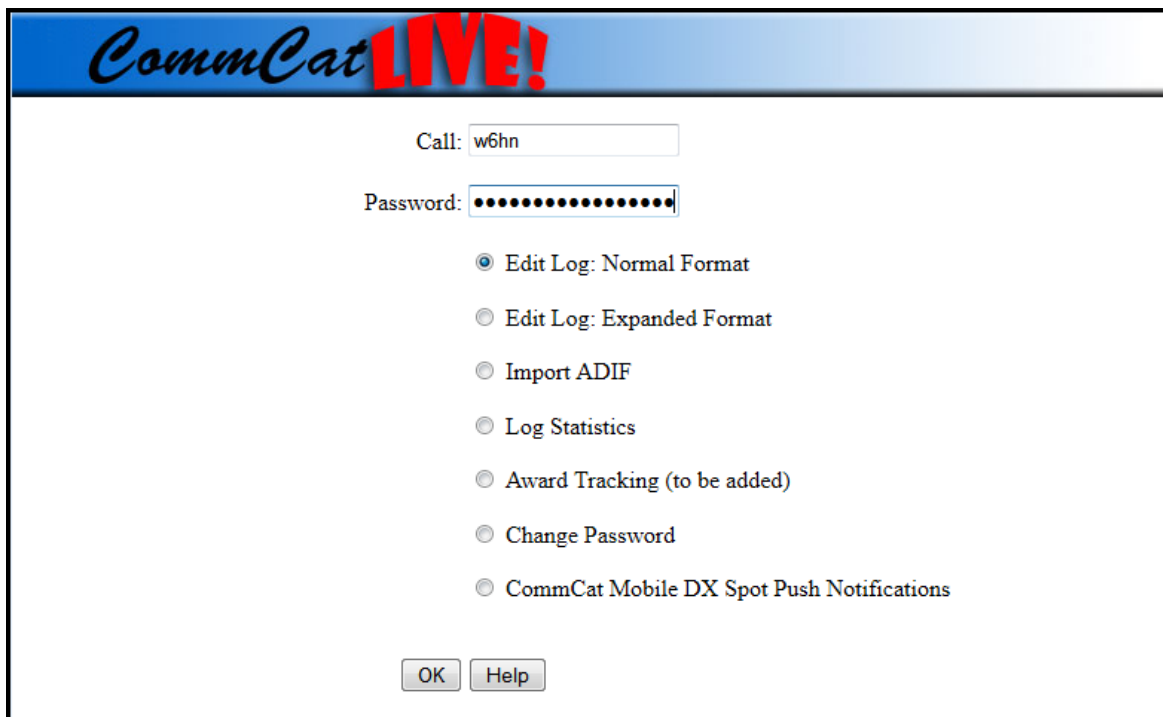
Up to 50 contacts are shown in the CommCat Mobile Logbook window.

To search for a contact anywhere in your log, use the search box at the top of the Logbook window. Any contacts (up to 50) with the specified station are shown in the Logbook window.

To return to the normal Logbook view, click the refresh button at the bottom of the Logbook window.

Your entire log can be viewed and edited at <http://MyQsx.net/mylog>. To log in to view your log, use your call and registration code.

## 7.2 Logbook Main Menu



The screenshot shows the CommCat LIVE! Logbook Main Menu. At the top is a blue header with the text "CommCat LIVE!" in a stylized font. Below the header, there are two input fields: "Call:" with the text "w6hn" and "Password:" with a masked password represented by dots. Below these fields is a list of radio button options: "Edit Log: Normal Format" (selected), "Edit Log: Expanded Format", "Import ADIF", "Log Statistics", "Award Tracking (to be added)", "Change Password", and "CommCat Mobile DX Spot Push Notifications". At the bottom of the menu are two buttons: "OK" and "Help".

### Call

Enter your call

### Password

Use your Registration Code until you have changed your password

### Edit Log: Normal Format

Open your logbook for viewing and editing using the basic log fields

### Edit Log: Expanded Format

Open your log for viewing and editing using all fields

### Import ADIF

Upload your system logbook so it can be viewed and edited in MyQSX Log

### Log Statistics

Display graphs and charts detailing statistics about your log activity

### Award Tracking

To be added

### Change Password

Change your password from your Registration Code to one more easily remembered

### CommCat Mobile DX Spot Push Notifications

Set up rules for needed spots. Push Notifications are sent to your iPhone/iPad when a spot is found matching the rule.

Select the option you wish to use, then click OK.

## 7.3 MyQsx Log



### Viewing

The MyQsx Logbook displays contacts in date order, starting with the most recent. To change the order to the earliest contact first, click the Start cell in the header.

You can sort the logbook by clicking any header cell to sort by that field. For example, to sort by call, click the Call header cell.

To reset the order, click Start or the Refresh button (see below).

To return to the MyQsx Logbook main menu, click the Home button (see below).

### Editing

Edit the contents of any field by clicking the cell you wish to change, then editing the contents. To add a new record, click the Blank page icon in the toolbar.

### Selecting Contacts

Click any box in the Sel (select) column to select a QSO record. Click it again to remove the check. Selected contacts are used by the Delete, Export, Print, and Log Statistics functions.

Select all contacts in your log by clicking the checked box in the toolbar. Remove all checks by clicking the empty box in the toolbar.

Selected contacts are preserved in the logbook from one session to the next. If you select contacts, exit MyQSOX Logbook, then return later, the selected contacts are retained.

Use the Search function (see below) to isolate contacts of interest, then use the Select All toolbar to select those contacts. Once selected, you can delete, export, print, or display stats for those records.

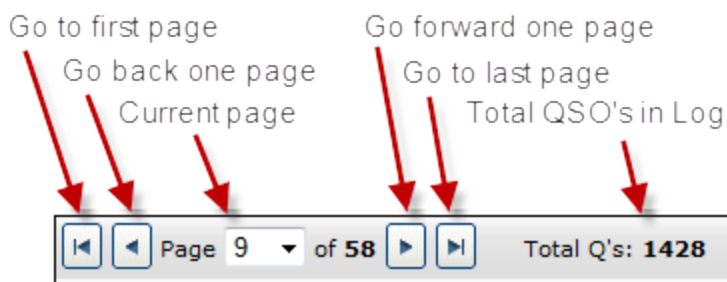
### Searching for Contacts

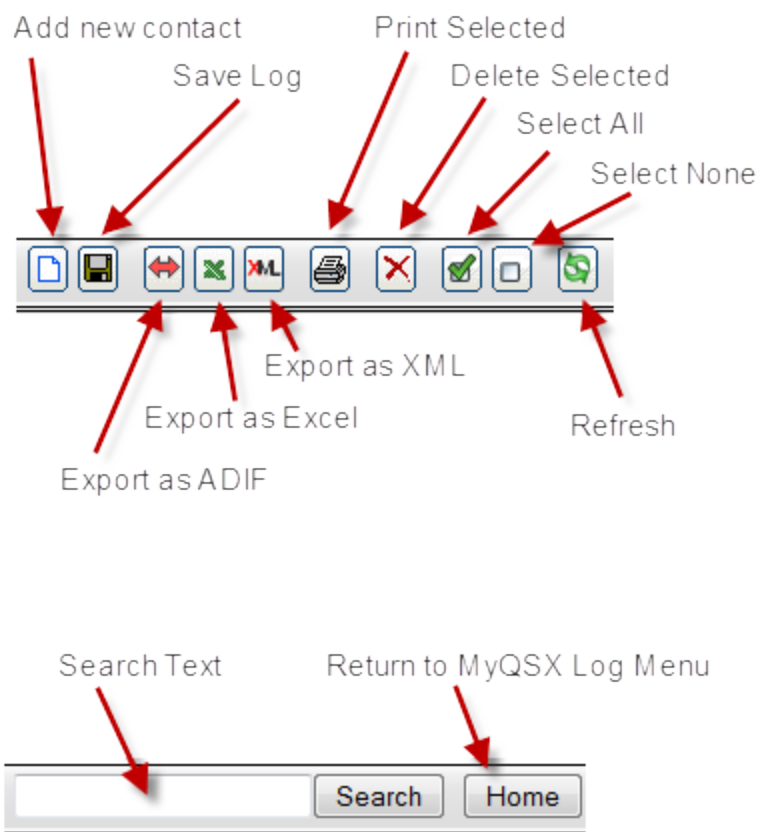
To find QSO's for a call, enter the callsign in the Search box and click search. You can also enter part of a call. To find all 3D2 stations, enter 3D2 and click Search. To find all calls with the number 2, enter %2.

You can search other fields using the column name. To find all US calls, enter DXCC=291.

### Toolbar

The toolbar buttons are described below.



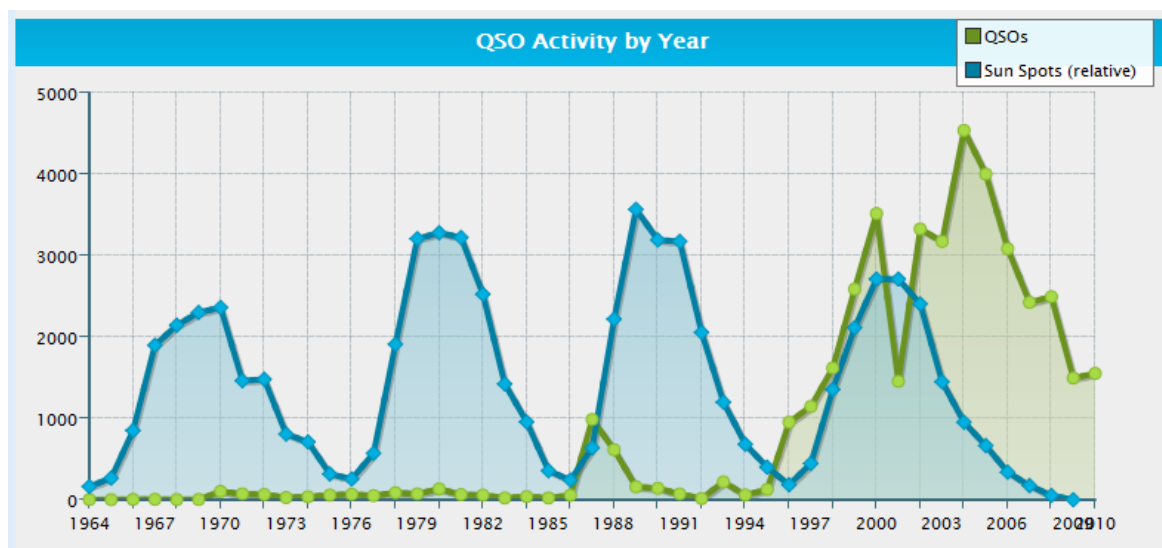


## 7.4 Log Stats

Various statistics for your log are computed in the Log Stats section of MyQSOX Log. The stats are found using any selected contacts. If no contacts are selected, the entire logbook is used.

The statistics and graphs include:

- Total QSO's analyzed
- First contact details
- Last contact details
- Unique callsigns (count excludes callsign dupes)
- Average time between contacts
- QSO Mode pie chart
- Digital Modes pie chart
- Bands pie chart
- DXCC QSL status pie chart
- QSO Activity by year area chart



The QSO Activity graph includes a relative sun spot number plot so you can see how your activity varied with sun spots. Keep in mind that the numbers shown for sun spots are relative and do not reflect the actual numbers.

Move the mouse pointer over the various sections of each graph to see details.


Click the Home button to return to the MyQSOX Logbook main menu.

Logbooks containing a large number of contacts can take several minutes to analyze. Please be patient. The stats functions have been tested using a log with over 80,000 contacts.

## 7.5 Spot Push Notifications

The MyQSOX Spot Push Notifications feature sends push notifications to your iPhone when a needed spot is found. Your MyQSOX logbook is used as a basis for needed spots. The rules you define in the Spot Push Notifications page determine how your log is tested.





This form provides a way create Push Notifications for needed DX spots.  
The Push Notifications are sent to your iPhone or iPad based on your MyQsx log.

Existing Spot Notification Rules:

If call has W on 20	-
Push Test WAZ	-

You currently have 2 Spot Notification Rules.

Send push notifications when a spot:

☒ Call

☐ Is needed for DXCC (not confirmed)

☐ Is needed for DXCC (not worked)

☐ Is needed for WAZ (not confirmed)

☐ Is needed for WAZ (not worked)

On Band:

Using Mode:

Spotter Continent:

Text in spot info:  Text:

After Notification is sent, delay before new check:

This Rule will be automatically disabled in

Enable this Rule?

\*Push Description:

\*Required field

You can set how long the spot test is in effect, up to a maximum of 90 days. At the end of the define period, the spot rule not deleted, but is set to disabled.



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