AN INTRODUCTION TO SETTING UP LOGGER32

by Terry (G4CHD)

1. WHY USE ELECTRONIC LOGGING ?

If your handwriting is as bad as mine, then electronic logging is the answer !
However, it's real benefit is in how easy it is to use once set up correctly due to the automatic entry of QSO start and end times, automatic entry of QSO frequency/band, and automatic use of upper case where required. It provides a quick indication of when/if you have previously worked the station, and whether QSLs have been sent/received. It can often be also linked to qrz.com to automatically look up the stations details and enter some details if required.

2. WHAT DO YOU NEED FOR ELECTRONIC LOGGING ?

There are just 3 things :   Suitable Logging Program
                             Computer
                             Optional interface between radio and computer

3. WHICH LOGGING PROGRAMS ARE AVAILABLE ?

The list of programs available is enormous as can be seen at www.ac6v.com/logging - some being completely free. Some commonly used free ones are Ham Radio Deluxe, DXkeeper, WinLog32, and Logger32 but there are many more with some more suited to Contest working etc.

4. WHY CHOOSE LOGGER32 ?

I chose Logger32 because it is completely free and well supported. It is relatively easy to use once set up and there are Gateway programs to link it to qrz.com , Fldigi (psk), Digital Voice Keying, and a Log printout program etc.

5. HOW TO LOAD IT ONTO MY COMPUTER ?

Go to the web site **www.logger32.net/,** click on **Program Files**, then in the **Full Version** section, click the initial icon. This downloads the program **lgrfull3460.zip** (approx 30Mb) and unzip all files to any folder. Run **setup.exe** and accept the default folder **C:/Logger32/**   (which must be directly off C:)
The program is now installed.

6. FIRST TIME USE

When the program is run for the first time, there may be updates - if so download and automatically install them.
On running the program, the display is initially as shown opposite: -
Enter your callsign and accept the terms and conditions. The callsign entry window will close leaving the following windows open :-
    Logbook Page, Notes, Previous QSOs, Grayline (Tracking),   Operator :, Worked/Confirmed, Cluster, DX Spots.

Not all these are normally needed - I only use Logbook Page, Previous QSOs, Grayline (Tracking), and Operator :
- the others I close (top right X)
Resize these 4 windows - mine were resized as shown opposite :-
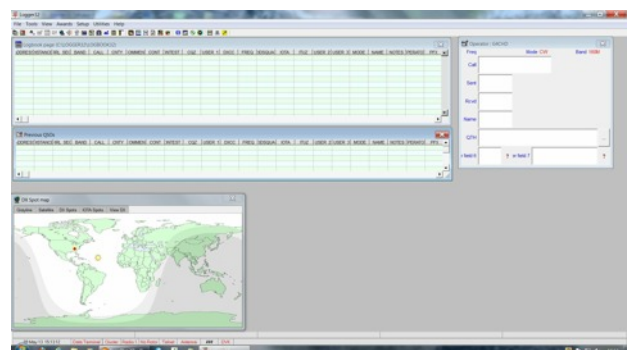
7. ONCE OFF INITIAL CUSTOMISATION

GENERAL : Date, Time and Frequency Display Format

Click **Setup on top Main Menu bar** to change it to the **Setup Menu bar** then using this menu bar:-

Click **Frequency,** then **Show Frequency Display and Log Frequency** and finally click on **Show Frequency in MHz - 1000 Hz resolution (eg 14.200)**

Click **Time Format** and select eg **23:59**

Click **Date Format** and select eg **23 Oct 2001**

Finally, on the **top Setup Menu bar,** click on **Main Menu** to return

Choose Logbook Strategy

Option 1 :-   Use a single Logbook for all qsos using your various callsigns eg: G4CHD, G4CHDM (mobile), GW4CHD/M (mobile on holiday in Wales) etc.
This was particularly relevant during the Jubilee and Olympics year.
It is possible to extract qsos made with any particular callsign eg all qsos using G4CHD/M

Option 2 :-   Use several different Logbooks where you need to extract a particular set of qsos using a single callsign. eg to extract those qsos made with G4CHD in a given Contest.
Thus individual Logbooks should be used for each Contest and a separate Logbook for everyday other use.

I shall assume option 1 and use a single logbook with both my home and mobile callsigns.
The default Logbook name is Logbook32 and is stored in C:\Logger32.
It would be thus preferable to rename this Logbook :-
   On the **top Menu bar** click **File** and then **Change Logbook**.
   Edit the name of the Lookbook (Logbook ??) eg to **G4CHD LOGBOOK** followed by **Apply**
At this point your home callsign is selected. Once qsos have been entered using this callsign, qsos using your mobile callsign can be added as will be explained later.

LOGBOOK WINDOW :Choose Logbook and Previous QSOs column headings to use and their order

By default, the Logbook and Previous QSOs displays use 47 columns -
Suggest that the following list and order could be adopted :-
   QSO Number
   Operator (optional as only needed if several callsigns used)
   Date
   Start time
   End time
   Mode
   Power (optional)
   Band
   Frequency (use either band or frequency or both)
   Callsign
   RST Sent
   RST Received
   Name
   QTH
   Comment/QSL Sent/QSL Received/eQSL Sent/eQSL Received are other optional choices

To select and edit the column headings and their order :-
Right click within the **Logbook window**, select **setup** and the **Show Logbook Page Layout** window opens as shown opposite :-
Untick all but those listed previously.
**Edit** the **column headings** (2nd and 4th columns) eg QSO_NUMBER becomes QSO Number etc
The ticked edited columns now **need to be reordered**. The process is a bit awkward but **left click and hold** on the **yellow pointer** of the chosen entry and slide it **vertically up/down** as required (to move to the other column, slide down to the bottom of the list, then slide horizontally across and then vertically upwards.
Release when pointing to the **yellow square** where you require the entry to be placed once you hear the beep.
Finally, click to **tick Show Logbook Page Window column headers as Multi line** and then **Apply**.
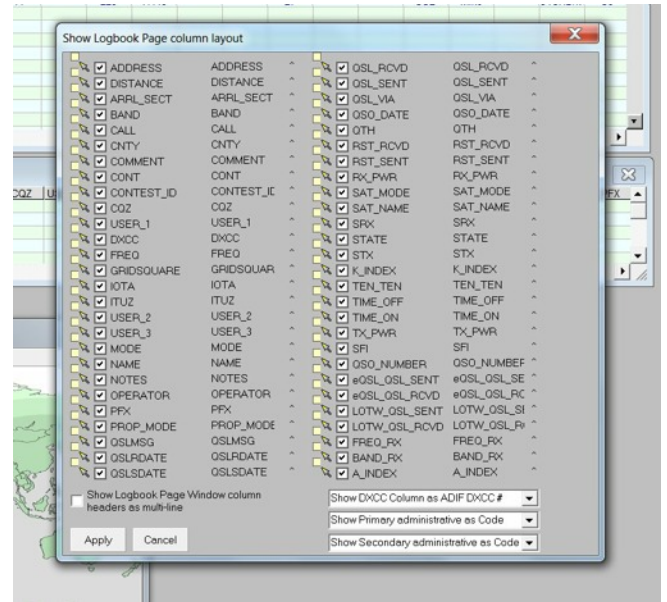
LOGBOOK WINDOW : Choose Row Highlight Colours for QSL Sent/Received

Click **Setup on top Main Menu bar** to change it to the **Setup Menu bar** then using this menu bar:-
Click on **Highlight** and then select **Worked Highlight**. Ensure **Show Worked Highlight** is ticked and click on **Choose Worked Highlight colour**. Select eg pink and then click **OK**.
Repeat for Confirmed Highlight (eg Pale Blue) and ensure paper and eQSL are selected.
Repeat for QSL Sent Highlight (eg Pale Green) and again ensure paper and eQSL are selected.
Finally, on the **top Setup Menu bar,** click on **Main Menu** to return

QSO Number	Operator	Date	Start	End	Mode	Power	Band	Freq	Callsign	RST Sent	RST Rcvd	Name	QTH	Comment	eQSL Sent	eQSL Rcvd	QSL Sent	QSL Rcvd
1	G4CHD	10 May 2013	15:48	15:48	SSB		40M	7.145	G3YGJ	59	59	Dave	Bideford		Y	N	N	N
2	G4CHD/M	10 May 2013	15:49	15:49	SSB		40M	7.145	G3PGA	59	59	Mike			N	Y	N	N

GENERAL : Choose QSO Entry Method

Option 1 :- Enter previously made QSOs by hand.

Option 2 :- No radio CAT control - Frequency/Band/Mode to be entered manually
This is done by left clicking on the **Frequency** at the top of the **Operator** window and from the BandMode Selection window, select Band and Mode from Bandplan.
The Frequency is entered in the box provided.
If the **Bandplan needs editing**, from the **top Main menu**, click on **Tools** and then **Setup Bands and Modes.** Edit as required in the new window.
Note that the Lower Frequency entry should always be lower than the entry above it.

Option 3 :- With radio CAT control - Frequency/Band/Mode are automatically read from radio.
Setting up CAT control is covered later in this document.
Possibility to tune radio from Logger32.

OPERATOR QSO ENTRY WINDOW :

All these changes are made by a **right click** in any **field in the Operator Window**, followed by hovering over **Setup** and then making a selection from the resulting **drop down menu**

Your Latitude and Longitude

This enables the QSO distance to be calculated and your position to be correct on the Grayscale Map. Select **My QTH Lat/Long** and enter details. Note that your latitude and Longitude can be sufficiently calculated from your Gridsquare eg io71va is mine.

QSO Start and End Times

The QSO End time is by default when the Enter key on the keyboard is pressed and the QSO details are placed in the Logbook.
The suggested Start time is when the TAB keyboard key is used to move from the callsign field in order to enter the sent and received rst, name and qth etc. This is chosen by selecting **QSO Start Time** and then choosing **Callsign Field loses Focus**.
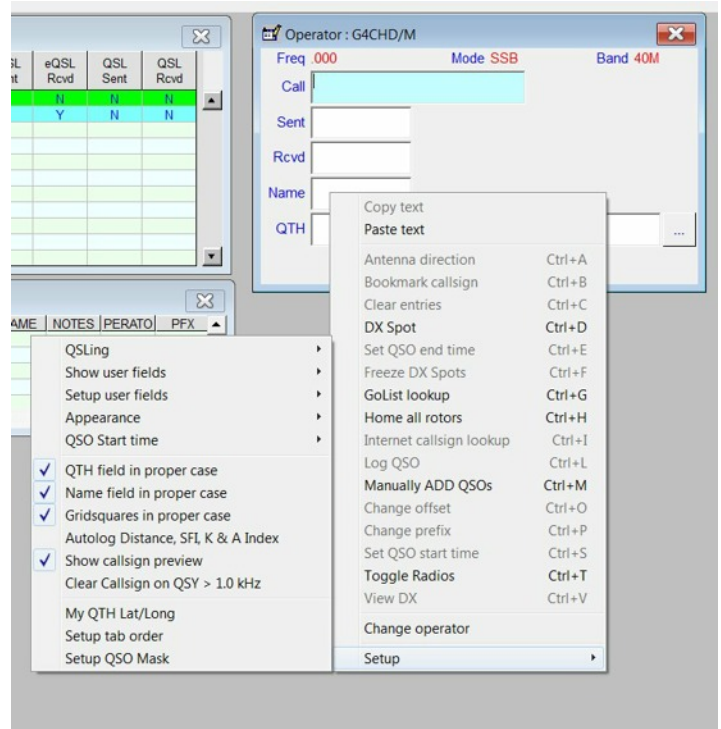
Callsign, Gridsquares and Initial letter of Name and QTH in upper case

Callsign is in upper case by default.
To ensure that the Gridsquare entry is all in upper case :- ensure **Gridsquares in Proper Case** is ticked.
To ensure that Name and QTH start with upper case, ensure that both **Name Field and QTH Field are in Upper Case** are ticked.

Show Prompts with Previous Similar Callsigns Worked

Ensure **Show Callsign Preview** is ticked.
This will enable similar worked callsigns to appear as you enter a callsign which if working for a second time, can be selected from the list to speed up callsign entry.

Transfer Selected Details from a Previous QSO

Select **Setup QSO Mask** and in the new window, **tick those fields** from which you want to transfer details eg; **name, qth, gridsquare**

Use of User Field 6 to record TX Power and Removal of User Field 7

By default, User Fields 6 and 7 are shown but have no association.
To **allocate and rename User Field 6 to TX Power** with a default value, hover over **Setup User Fields** and then select **User Field 6**. In the new window, edit User6 to read **TX Power**, choose TX_PWR for the ADIF Field from the drop down list, leave **0 as the Max number of characters** (no limit), enter eg **80W** as the Preset text, **tick Show the Preset text**, and in the lower CW section, tick **Use this ADIF Field**.
Finally click **Apply**.

To remove User Field 7, hover over **Show User Fields** and **untick Show User Field 7**.

Flag All QSOs to QSL

Hover over **QSLing** and eg click on **Flag QSOs for QSL** (paper) and/or **Flag QSOs for eQSL** which will now be ticked.

TRACKING (GRAYLINE) WINDOW SETUP :

Select the **View DX** tab in order to see the location of the station being worked (obtained from callsign) **Right click on the Map** and ensure **Show Sun, Overlay Grayline**, and **Show My Location** are all ticked.
Right click on the Map again and select **Setup Marker** and choose **Small Marker**.

It is also possible to greatly customise the Map eg change the selected top tab (eg View DX) to a different background colour eg light blue by right clicking on the tab and select Front Tab Colour and make your choice followed by OK.
The Map can also be changed to include a topographical background and Meridian Lines. Right click on the View DX map and select Create Custom Based Maps. Click Show Topographic Overlay and Show Meridian Lines and then click Create New Map, click OK to accept delay and finally click Exit. The new Map is shown opposite.
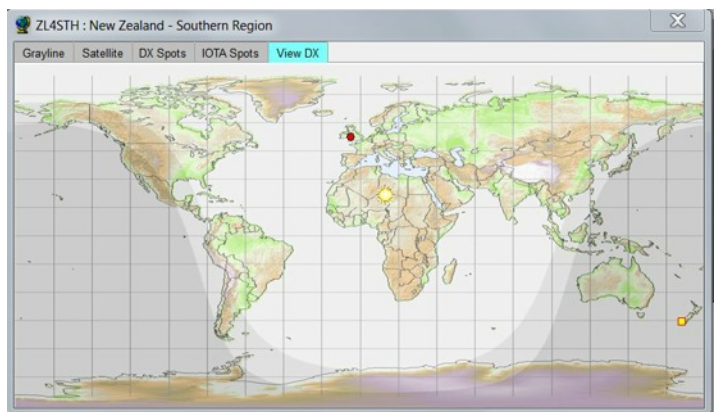
RADIO CAT CONTROL SETUP :

Many radios allow CAT control which enables the frequency and mode to be read directly and automatically from the radio. The first requirement is for a **CAT cable connection** from the Radio's Data socket to the computer (typically USB) eg visit www. Radioarena.co.uk. A USB Driver may be required and normally is readily available from the same source as the cable.

The following steps were used to setup a **Yaesu FT450** to a laptop using a USB Cat cable.
On the **top Main Menu**, click on **Setup** to change this top Menu line and then click on **Radio** and then in the drop down menu, click on **Radio 1 configuration**. A new window will open.
The **COM Port number** should be the higher of the two shown in **Device Manager/Ports Com and LPT** on your computer after connecting the radio and computer by CAT (**eg COM8**)
The **Baudrate** should be the same as the **CAT Rate** set in your radio (**eg 4800**)
Select your **Radio** from the drop down list (eg **FT450**)
The **Data bits, Stop bits, and Parity** bits should be as set in the CAT Rate for your Radio (**eg 8 bits, 1 stop, 0 parity**)
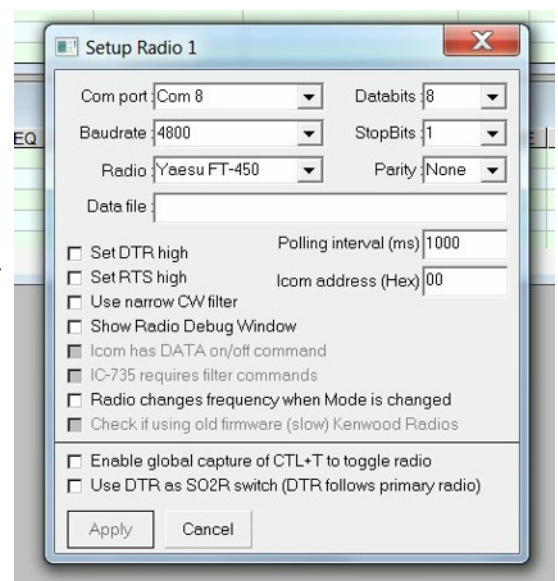No other settings were changed.
Finally click **Apply**.
Re click on **Radio** on the top Menu, and select **Use Radio 1**.
If there is a **problem**, check to see if the **Radio1 box** at the **bottom of the screen** is **red** and if so **right click** and select **Open Port**.
The system should now be fully operational in either manual or via CAT automatic control.

ENTER PREVIOUS QSOs BY HAND

Right click any field in the **Operator QSO Entry window**, and select **Manually Add QSOs** which opens the window opposite.

This enables QSOs made historically to be entered and is probably best done first as the QSO Number cannot be later changed.

ENTER QSOs IN REAL TIME EITHER WITH OR WITHOUT RADIO CAT CONTROL

Simply enter the callsign (lower case) in the **Operator QSO Entry** window, and hit TAB.

The **callsign** will be entered in uppercase automatically, and the station's location will be shown by a yellow box on the Grayline Map.

The bar at the bottom of the screen will show the country as well as the heading/distance (short path). However, hover the pointer over the values and both the short and long path values will be shown.

Also, the **QSO start time** will have been recorded. The marker should now be in the **Sent field** and can either be entered or by simply another tab press, the default value (59 or 599) will be automatically entered. Repeat for the **Rcvd Field**.

Continue tabbing to enter the **name** and **qth** (lowercase and the first letter will automatically be uppercase)

Finally, at the conclusion of the QSO, press **Enter** and the **End time** will be recorded and the whole QSO details will be transferred into the Logpage. The **callsign box** will **automatically be cleared**.

SAVING FILE FOR EQSL UPLOAD AND BACKUP FILES

It is **strongly advised that a backup file (adif) be made at regular intervals** in case of any program failure as this may be the **ONLY** way to recover your data !

An ADIF Backup File is created by clicking **File** on the top **Main Menu bar**, then **Export Logs** and choose **ADIF (.adi) File**. In the new window, select whether all or chosen operator qsos are to be saved (default is **All Operators)** and **Include Logbook International Entries**. Click **Start** and browse to the **required Folder** and/or create a New Folder in which to store your backups and give the Backup File a suitable name and click **Open** and then **Yes** to create the backup file. Click **OK** when told the number of QSOs backed up.

Normally before you start to receive eQSLs it is a good idea to **create a file to export to eQSL**
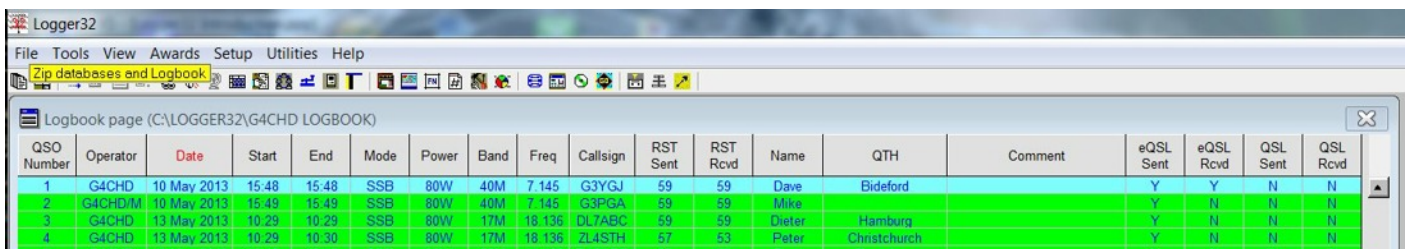Click on **File** on the top **Main Menu bar** and select **Export Files** and select **eQSL Files**.
Again, eg choose **All Operators** and either **accept the default location** or browse to another and click **Start**.
I normally then click **Yes** in the new window to **overwrite any old file** since I will have already uploaded that one to eQSL.
Then click **Yes** to show that these have been uploaded to eQSL (perhaps a bit premature !!) **which of course you must now immediately do**.

Zipped (compressed Backup Files) can also be made - one zip file for each Logbook and one zip file for user data. Click on the **first 2 left hand buttons on the 2nd top Menu Bar** and click **Start,** and then **Exit.**