

Chester and Flintshire Talking Newspapers

Digital Recording and Operating Manual

Table of Contents

Section 1: Chester & Flintshire Talking Newspapers.....	3
Section 2: Adobe® Audition® 2.0 – General Instructions.....	4
2.1 General Information.....	4
2.2 Digital Recording Procedure.....	4
2.3 Transport Controls.....	5
2.4 Generic Recording Screens.....	5
2.5 Timing information.....	6
2.6 Generic Saving Screen.....	7
Section 3: Adobe Audition - Magazine Specific.....	8
3.1 To Insert a file or CD track using Mix Paste.....	8
3.2 Deleting selected sections of recordings.....	9
3.3 Increase/decrease volume level to selection.....	9
3.4 Magazine Recording Technicians only:	10
Section 4: Post-recording processing.....	11
4.1 Create a copy of the wave file for cassette duplication.....	12
4.2 Saving digital recordings.....	12
4.3 Housekeeping.....	12
Section 5: Telex EDAT™ digital recording to Compact Cassette tapes	14
Section 6: Converting WAV files to MP3.....	17
6.1 Tracking Magazine & converting to MP3.....	18
Section 7: CTN Master Disk Builder.....	21
7.1 Starting CTN Master Disk Builder.....	21
7.2 Selecting Publication.....	21
7.3 Input folders.....	21
7.4 Setting the copy order for folders.....	21
7.5 Adding (or editing) extra folders to copy.....	22
7.6 Building master disks.....	22

1: Chester & Flintshire Talking Newspapers



Chester Talking Newspaper, a registered charity, has its own recording studio located in Chester city centre. Established since 1977, we have been recording and distributing hundreds of audio cassette tapes every week, to the visually impaired in Chester and Flintshire.

Our studio is now equipped to enable us to record and copy digitally, and this has proved to greatly enhance the efficiency of our operation.

In preparation for when cassette tapes are no longer available we now aim to deliver a fully digital product to our Service Users using **memory sticks**. These devices allow us to offer a higher quality service without the restrictions and limitations of audio cassettes, allowing us to offer increased content, and allowing listeners to quickly navigate to the content they wish to hear.

Currently our Chester edition is in the process of "going digital", and we hope to start offering the Flintshire edition in a digital format soon.

The aim of this manual is to give all volunteers an insight and grounding into the aspects of digital recording that will be most useful for the successful changeover and implementation of the new systems.

This manual is available in hard copy for each recording team, on the recording computer in the studio, and on our website at www.chestervip.org.uk

Please Note:

Whether you record the News or Magazine, please read the whole Manual

2: Adobe® Audition® 2.0 – General Instructions

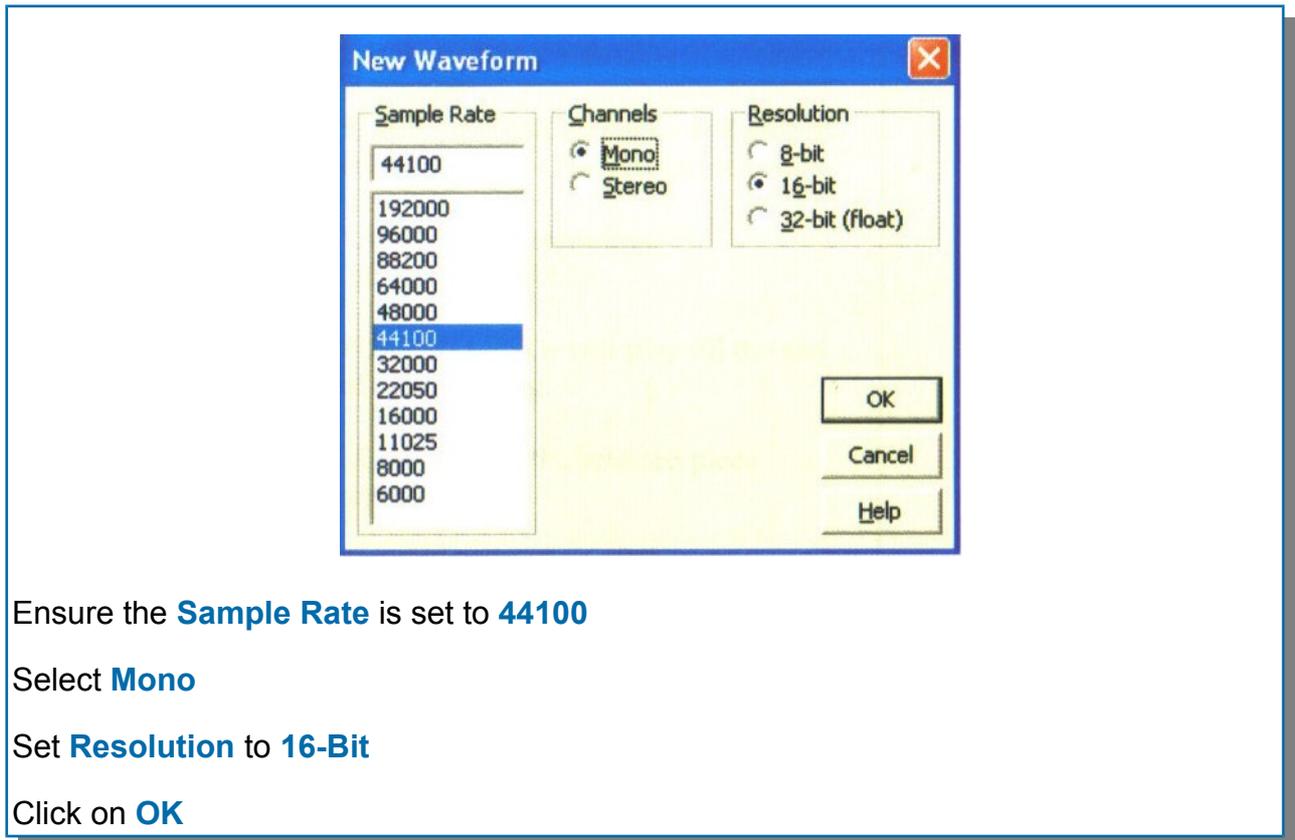
2.1 General Information.

Refer to **4 - Post-recording processing**, as required.

2.2 Digital Recording Procedure

Start the computer and, from the Desktop, open up Adobe® Audition® by double-clicking on the desktop icon.

Click on **File**, then **New** to start a new recording, the following options will appear:



A blank recording screen will show.

You are now almost ready to start the full recording, but first start to record (by pressing **Ctrl+Space**) until the vertical cursor line has passed about three-quarters way across the screen, then stop the recording process (by pressing the **Space** bar). With the mouse, left-click on the **Skip Back** button in the Transport Field, or press the **Home** key on the keyboard, to return the cursor to the start point. (This has the effect of showing a more easily viewed waveform on the screen as recording progresses).

Next you need to **save** your blank file:

Click on **File**, then on **Save As**. When the drop-down menu shows, ensure that you select the correct folder from the **D:\ (Audio)** drive.

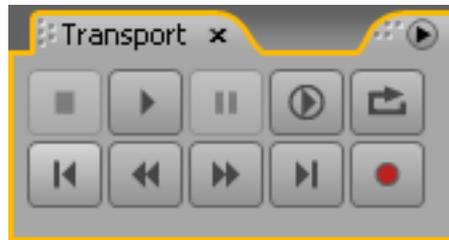
Click on **Save**.

Ensure that the file is saved in the correct format type, i.e. **Windows PCM (*.wav)**. And with the correct filename. (See section **4.2 - Saving digital recordings** for file names and folders)

With the cursor at the left-hand of the screen, you are now ready to start recording.

NB. The **News** recordings **MUST** be longer than the **Magazine** recording by at least **10 to 20 seconds**. This is a requirement for the files input to the EDAT system.

2.3 Transport Controls



In the above image, the controls are (left to right, top row first):

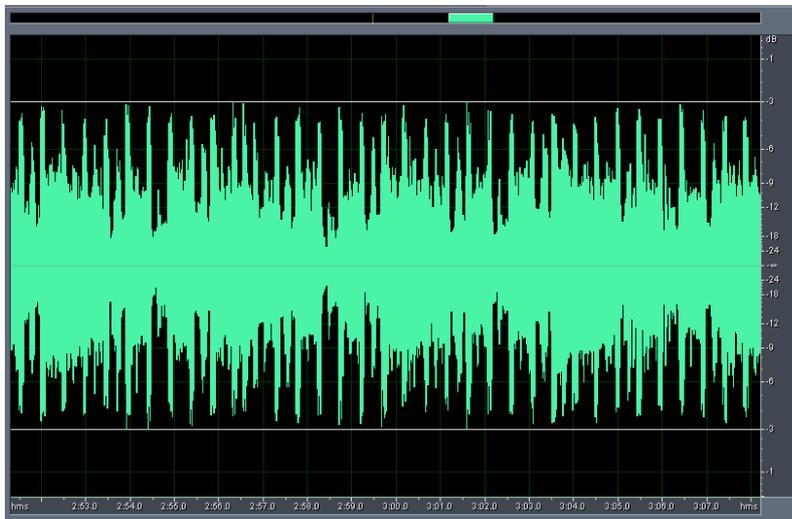
- Stop (**Spacebar**)
- Play (**Spacebar**). This will stop at the end of the screen or highlighted section
- Pause while recording (**Ctrl+Spacebar**)
- Play to end. This will play through to the end of the recording.
- Loop. This plays the selected section repeatedly.
- Skip Back. This takes you to the previous cue marker, or the start of the recording if no markers before the current position.
- Rewind. Click and hold to rewind.
- Fast Forward. Click and hold to fast forward.
- Skip Forward. This takes you to the next cue marker, or the end of the recording if no markers after the current position.
- Record (**Ctrl+Spacebar**)

2.4 Generic Recording Screens

The bar above the waveform represents the entire recording. The **Green Section** of the bar represents the section visible on screen. This can be grabbed and moved backwards and forwards to navigate your way around the recording. The side edges of the bar can also be dragged to increase or decrease the amount of the recording visible on screen. Once stopped, any section of the recording can be highlighted for editing by clicking and dragging over the waveform. Common editing controls include:

- **Delete key** to delete the highlighted section
- **Ctrl+C** to copy section

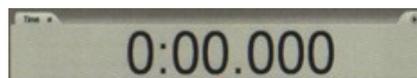
- **Ctrl+X** to cut section
- **Ctrl+V** to paste a copied or cut section in
- **Ctrl+A** to select the entire waveform
- **Ctrl+Z** to undo the last edit
- **F8** to insert a marker



While recording use the white bars at the top and bottom of the waveform to help set the correct recording level. Aim to set the peak recording level between -3 and -1dB.

2.5 Timing information

Two windows below the main waveform give information about the recording time



The main time window shows the time at the current cursor position. Whilst recording, this will be the total record time. In editing, this time will show the **start** of any selected section of the waveform.

	Begin	End	Length
Selection	2:42.607	2:51.418	0:08.811
View	2:37.072	2:53.729	0:16.656

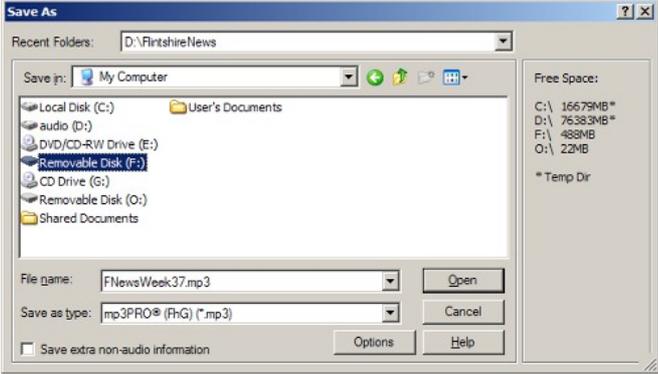
The additional time window shows two rows of information. The top row shows times for the current selection's start point, end point and length, whilst the bottom row shows the same times for the current view.

2: Adobe® Audition® 2.0 – General Instructions

Whilst editing, you can click in any of these time boxes to enter an exact time you wish to move to, or select.

2.6 Generic Saving Screen

More detailed and specific screens relating to recording or processing of Magazine or News files follow in this Section. See [Section 3](#) for details of editing the Magazine.



Select correct location in **Save In** field

Ensure **Save as type** shows **Windows PCM (*.wav)**

Give the file an appropriate name in the **File Name** field.

Click on **Save**

(See [4.2 - Saving digital recordings](#) for folders and file names to use)

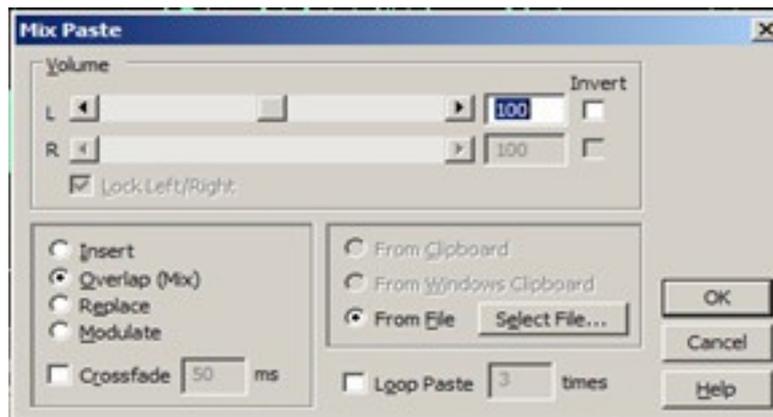
Please remember that we are developing our knowledge base of this system as we go along, and processes may vary with time.

3: Adobe Audition - Magazine Specific

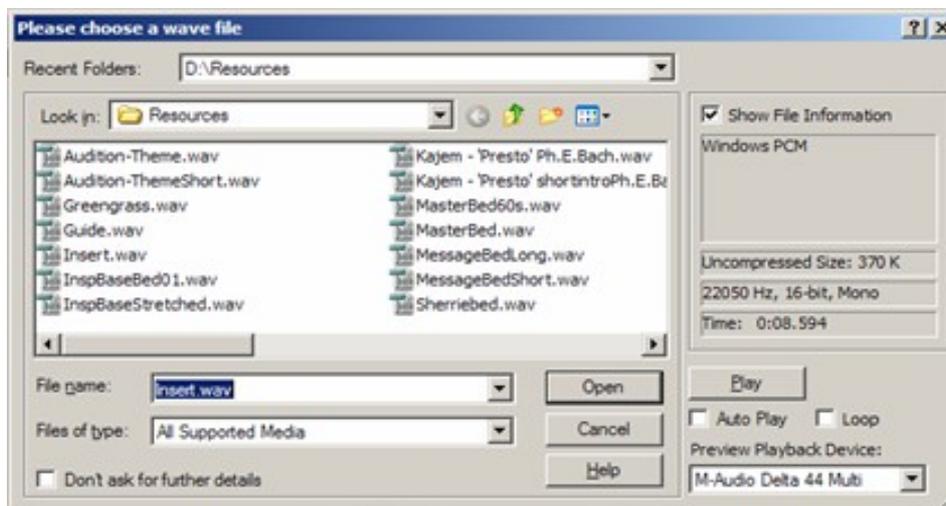
If not recording opening music from CD, it may be put at the start of the file by placing the cursor line (a **full** triangle at top and bottom) at the extreme left of the recording window, then following the instructions as for **Mix Paste** below:

3.1 To Insert a file or CD track using Mix Paste.

With cursor line at the point required in the recording window, select **Mix-Paste**, from the **Edit** menu.



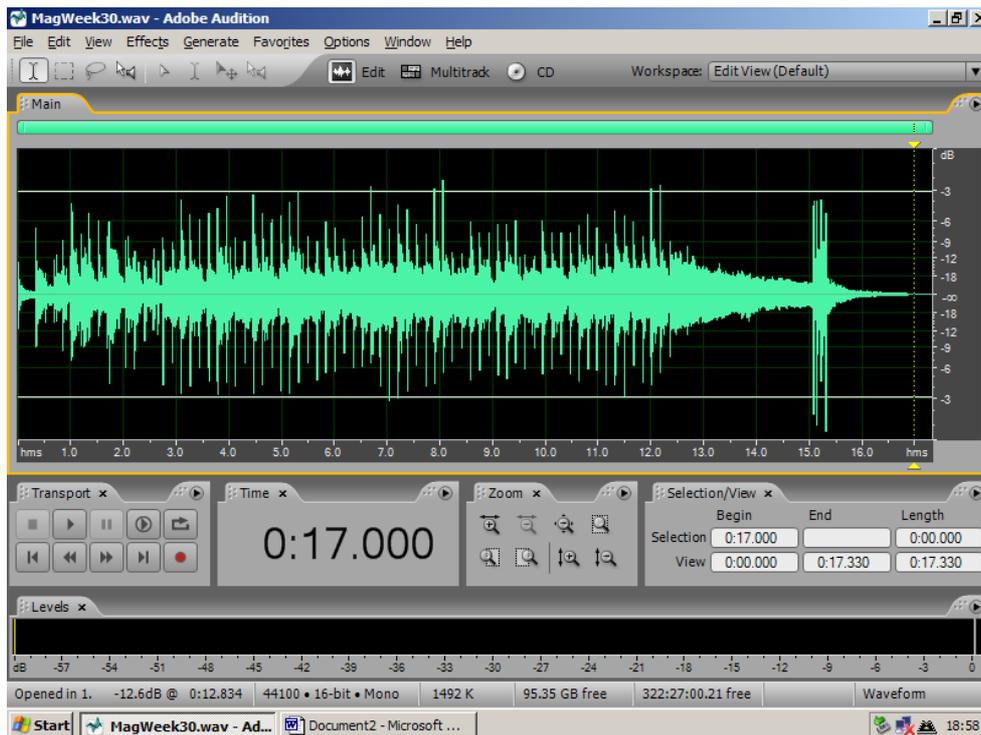
Click on **Select File**, with **Volume** as highlighted (**100%**)..



Select the required file from the **Resources** folder, or CD track as shown in the following screen. Click on **Open**, then click on **OK** in the Mix Paste window to insert the file.

The required file will now be positioned in the recording window. Move the cursor to the right-hand end of the waveform in readiness to continue recording, as shown in the following screen.

3: Adobe Audition - Magazine Specific

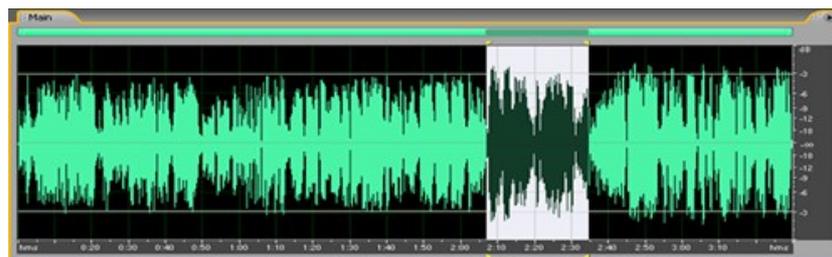


As recording progresses it is considered prudent to save the **Magazine** file at any convenient point when recording is temporarily stopped. Select **File**, then **Save**.

Now go to **Section 4 - Post-recording processing** before final saving.

3.2 Deleting selected sections of recordings

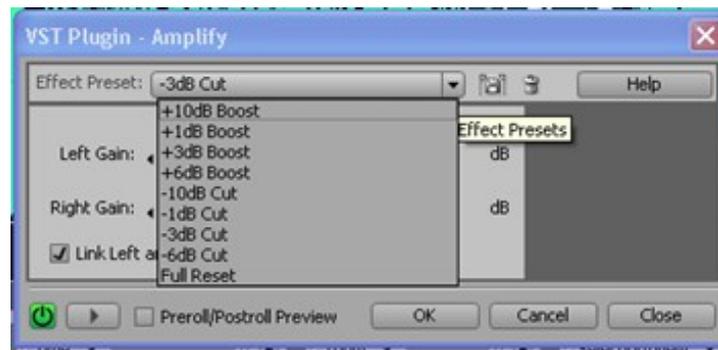
Place the cursor at the start point of the section requiring to be deleted, and drag to the finish point, then release. The section to be deleted will be highlighted as shown:



On the computer keyboard, press **Delete**. The selected portion will be removed. If you require to reinstate the selection, go immediately to **Edit**, and click on **Undo delete**.

3.3 Increase/decrease volume level to selection

From the **Effects** menu select **Amplitude**, then **Amplify**:



Using the drop-down **Effect Preset** menu, select the amount of reduction or increase required and click **OK**.

As with most Windows operations, to reverse the selection, select **Undo** from the **Edit** menu.

NB Go to **Section 4 - Post-recording processing** before final saving.

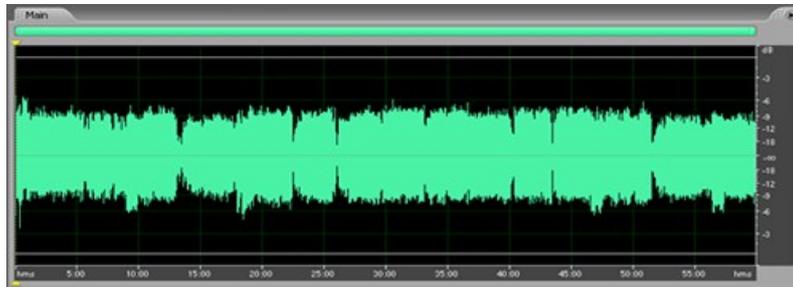
3.4 Magazine Recording Technicians only:

Please ensure that the **1Gb memory stick** has been erased before attempting to transfer files, since each WAV file will be in excess of 200Mb in size.

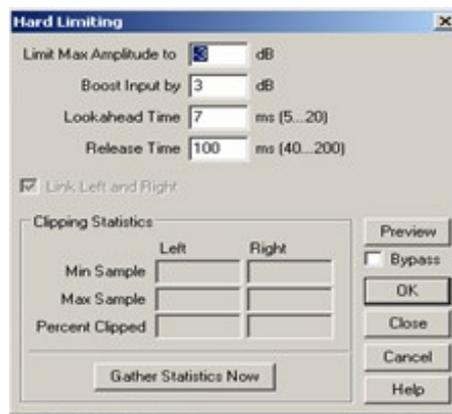
4: Post-recording processing

4: Post-recording processing

After recording and any required editing, the waveform will look like this:

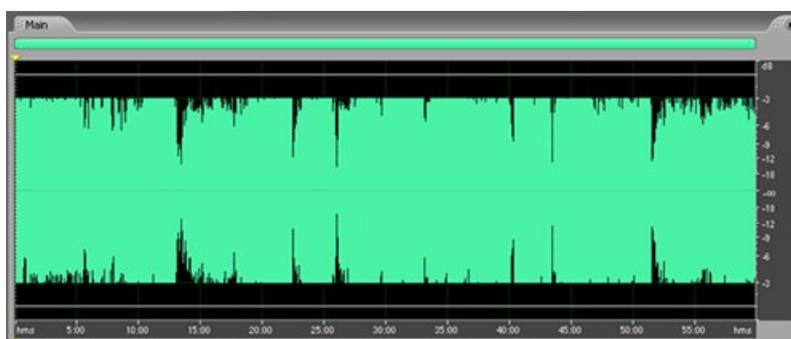


Click on **Effects** button, **Amplitude**, and **Hard Limiting (Process)**:



Set **Limit Max Amplitude** to **-3dB**
and **Boost Input** by **3dB**
click **OK**

After processing, the screen will look something like this:

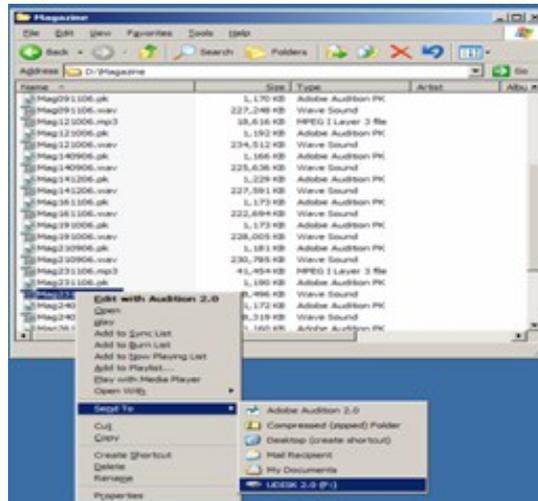


Save the file once processing is complete.

4: Post-recording processing

4.1 Create a copy of the wave file for cassette duplication

Insert the 1-Gigabyte memory stick in the computer's front **USB port**. In the appropriate folder on the **D:\ (Audio)** drive, right-click on the newly recorded file. When the drop-down menu shows, click on **Send to**, and then select **UDISK**. Remove the Flash memory only when the led has stopped flashing.



The 1 Gigabyte flash memory may now be used to transfer the files to the **EDAT™** computer for cassette copying.

4.2 Saving digital recordings

Throughout the year, using Week numbers 01 to 52, as appropriate

Files are identified and saved in the appropriate folder on the **D:\ (Audio)** drive as:

Publication	Folder	File Name	Example
Chester News	Chester	CNewsWeek NN .wav	CnewsWeek30.wav
Flintshire News	Flintshire	FNewsWeek NN .wav	NewsWeek30.wav
Magazine	Magazine	MagWeek NN .wav	MagWeek30.wav

When files are transferred to the **EDAT™** computer to generate the master copying file, the file names should be as follows.

Chester	ChesterWeek NN .mst	ChesterWeek30.mst
Flintshire	FlintWeek NN .mst	FlintWeek30.mst
Magazine (only)	MagWeek NN .mst	MagWeek30.mst

4.3 Housekeeping

As the year progresses, it is intended to 'clear down' and archive files as necessary to ensure that the computer function is not impaired.

4: Post-recording processing

NOTE: To process files for copying to memory sticks, please see [Section 6 - Converting WAV files to MP3](#).

5: Telex EDAT™ digital recording to Compact Cassette tapes

Place the **memory stick** containing the wav files into the computer's **USB port**.



This is the Telex EDAT™ opening screen, after double-clicking the EDAT™ icon. Click on **Duplicate** to open next screen.

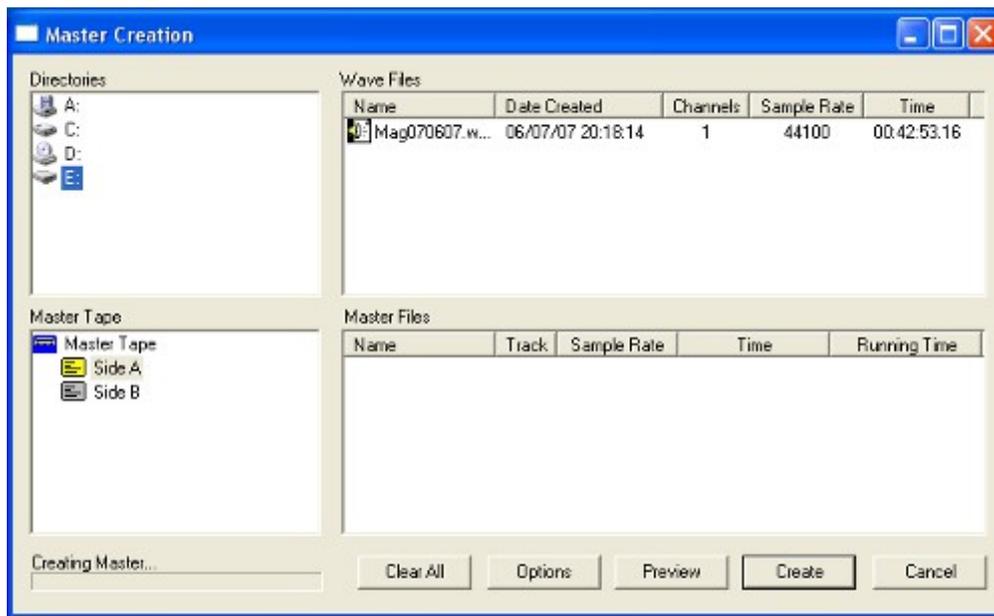


Click on **Create New Master**.



Name the new master file using the appropriate name (See **4.2 - Saving digital recordings** for file names to use). Click on **Create**.

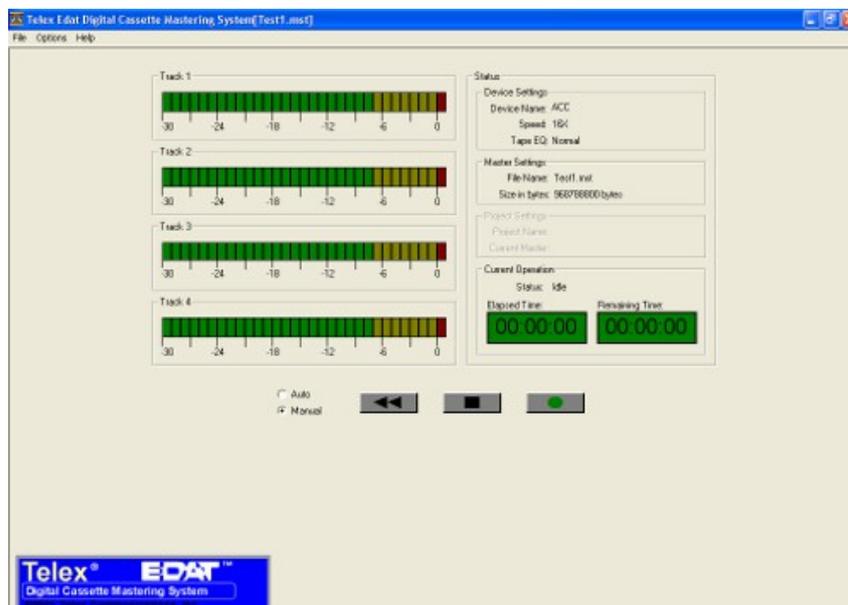
5: Telex EDAT™ digital recording to Compact Cassette tapes



In the **Directories** section, click on **E:** (which is the memory stick), the file(s) will now show in the **Wave Files** field. With the **Master Tape** field set to **Side A** (box yellow), click and drag the required news file to the **Master Files** field.

Select **Side B** in the **Master Tape** field, and drag the magazine wav file to the **Master Files** field. Click on **Create**.

Once the master file has been successfully created, the mastering window will show:



Load all of the cassette positions with erased and fully rewound cassettes.

Using the radio buttons, select **Auto**, then click on the **Record** button to create the new cassettes for distribution.

5: Telex EDAT™ digital recording to Compact Cassette tapes

If any cassettes have not copied properly, erase them, and repeat the recording process. (You should not need to re-create the master file).

Once the cassettes have all completed copying, close EDAT, shut down the computer, and turn off the power to the cassette decks.

If all cassette positions are not fully occupied and copying does not start, physically stop any rotating reel spindles with the fingers. The system will then start to copy.

6: Converting WAV files to MP3

Minimize Adobe Audition 2.0 and open the output folder in Windows Explorer. Once open delete all previous weeks files (for example if this week's files are **MagWeek1701.mp3** etc., delete all files starting **MagWeek16**)

6.1 Tracking & converting to MP3

Introduction

To enable listeners to have some directional control over the operation of the USB loudspeakers i.e. as if they wished to **fast-forward** or **review** a part of the recording, as they are able with compact cassette, it is necessary to split the recording into a number of tracks. The listener then has only to use the track reverse button to hear an item again without going back to the start of the recording.

There are two methods by which markers can be inserted into a waveform, either "on the fly" whilst recording, or in post-processing. Inserting markers after recording (post-processing) allows for more accurate placement, but takes time to find the correct positions to place the markers, whilst inserting when making the recording can sometimes leave markers a little out of place.

A marker should always be placed at the very start and the very end of the recording. Do this by pressing the **F8** key before starting recording, and pressing it again as soon as the recording has been stopped.

Whilst Recording

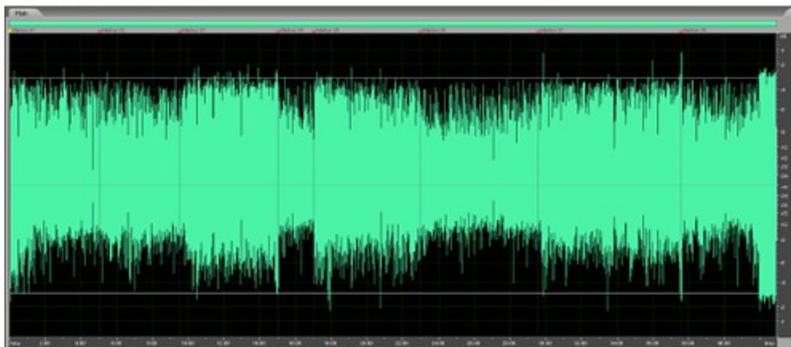
To insert a marker while the recording is taking place, simply press the **F8** key on the keyboard. This should be done as a minimum every time the reader changes. If the marker is not in quite the right position, it can always be adjusted once the recording is complete.

Post-Processing

Move the cursor to appropriate positions on the waveform, in turn, designating natural track breaks, i.e. usually where there is an item change in the programme. This may require reference to timing notes made earlier, and/or listening to the item to place the marker accurately at the appropriate point.

Use the mouse to select the point on the waveform where you wish to insert a marker, and press **F8**. Use the mouse-wheel or zoom controls to zoom into the waveform at the insertion point to position the marker accurately.

6: Converting WAV files to MP3

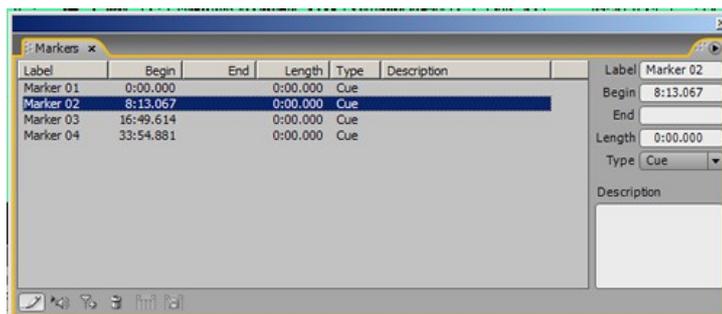


The screen shot above shows a recording with basic markers in position:

You can adjust the position of the markers by clicking and dragging on the small triangle at the top or bottom of each marker.

Once all markers have been inserted, they need to be converted to **range** markers in order to create the MP3 tracks.

Press **Alt+8** to open the **Cue List**. This is a list of all the markers which have been created, showing the time point where they have been inserted.



Label	Begin	End	Length	Type	Description
Marker 01	0:00.000	0:00.000	0:00.000	Cue	
Marker 02	8:13.067	0:00.000	0:00.000	Cue	
Marker 03	16:49.614	0:00.000	0:00.000	Cue	
Marker 04	33:54.881	0:00.000	0:00.000	Cue	

Label: Marker 02
Begin: 8:13.067
End:
Length: 0:00.000
Type: Cue
Description:

[OK] [Cancel] [Print]

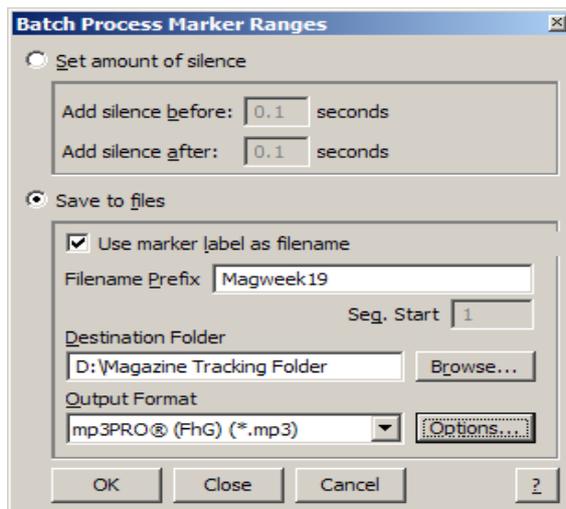
Click on the first marker, then holding down the **shift** key, click on the last marker. This will select all of the markers.

Click on the **Merge Markers** button to convert all of the markers to ranges, ready for processing to MP3 files.

Click on the **Batch Process** button to create the MP3 files

Select the following options in the Batch Processing window before clicking on **OK**

6: Converting WAV files to MP3



- Select the **Save to Files** option
- Ensure that **Use marker label as file name** is **not** selected.
- Enter appropriate text in the **Filename Prefix** box - this should match the wav filename.
- Check the correct destination folder is selected:
 - Magazine: **D:\Magazine Tracking Folder**
 - Chester News: **D:\Chester News MP3**
 - Flintshire News: **D:\Flintshire News MP3**
- Ensure that **Output Format** is set to **mp3PRO® (FhG) (*.mp3)**
- Click on the **Options** button, and check that the recording is set at **32kbps, 24000Hz, Mono (22.1:1)**

Click on **OK** to confirm the save options, then click **OK** in the Batch Process window. This will save each marker as a separate track in the selected folder.

Close or minimize Adobe Audition 2.0 and open the selected folder in Windows Explorer. Once open delete all previous weeks files (for example if this week's files are **MagWeek1701.mp3** etc., delete all files starting **MagWeek16**)

7: Website uploads

7.1 Saving for the website

Once the copies for cassette and memory stick have been created, a copy of the full recording must be created in MP3 format for the website. This copy includes some basic text information about the recording, which will be automatically included on the Listen Now page of the website.

From the **File** menu, select **File Info...** which will open a dialogue box.

In the **Comments** section, enter details of the main articles in the recording. Three or four article headlines are usually sufficient.

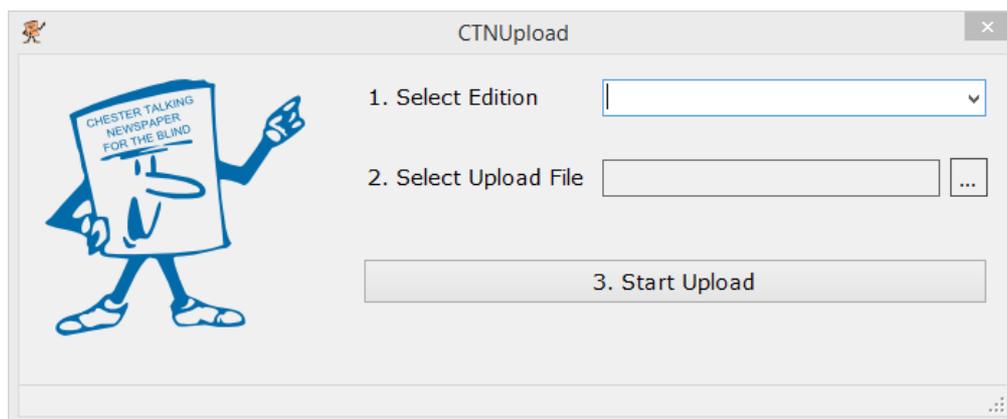
There is no need to add introductory text (eg "In this week's edition"), as this is automatically added when the file is uploaded to the website.

Click on **OK**, then go to **File** and **Save As**. Select your memory stick as the file location, and ensure that **Output Format** is set to **mp3PRO® (FhG) (*.mp3)** then click on **Save**.

7.2 Uploading to the website

CTN does not have any internet access at the studios. Uploads to the site need to be done from home. If you do not have broadband internet access, in the first instance please see if another member of your team can do the upload. If this is not possible, send the prepared MP3 on a memory stick to the IT manager for upload using a pouch. **This should be an option of last resort!**

Your memory stick should have a copy of **CTNUploader.exe** on it. This is our custom program for transferring recordings to the website. This should run on any modern PC (XP or newer). If it does not run, use Windows Update to ensure that your .NET framework is up to date (at least Version 4.5)



Use the dropdown box at the top to select the edition you are uploading (**Chester, Flintshire, Magazine** or **Extra**), then click on the Browse button (...) to select your saved MP3 file and finally click on **Start Upload** to transfer to the website. A progress bar will show the upload – be patient, it will probably take at least 30 seconds to upload on an average broadband connection.

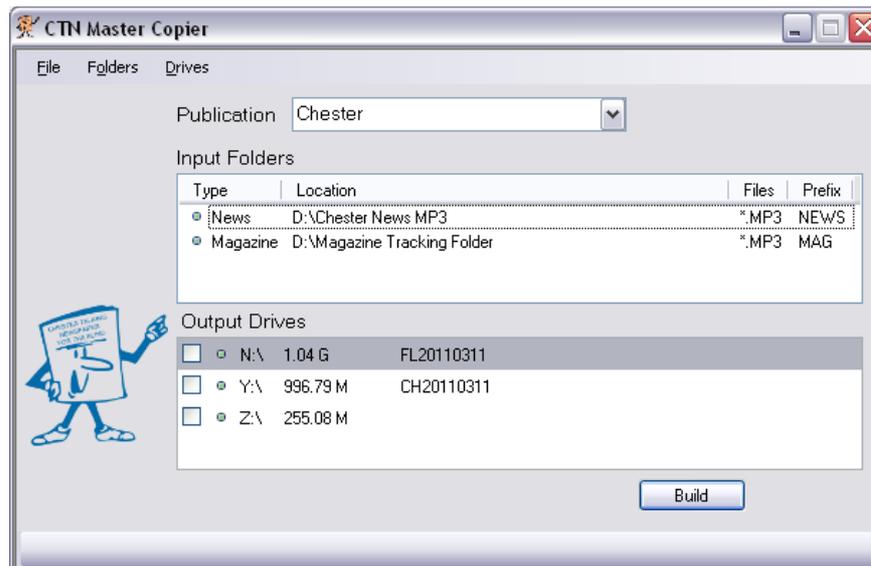
The program will automatically rename your selected file for use on the website.

8: CTN Master Disk Builder

The master disk builder programme is used to generate the master copies of the memory sticks, ready for duplication. It automatically reads saved MP3 files from the recording session, and copies them in the correct order to the master disks.

8.1 Starting CTN Master Disk Builder

CTN Master Disk Builder can be started by double clicking on it's icon on the computer desktop.



8.2 Selecting Publication

Use the publication drop-down to select between Chester and Flintshire editions of the newspaper. Each edition has it's own independent set of folders to copy from.

8.3 Input folders

With the correction publication selected, the currently set folders will be displayed. Each line in the display shows information for a different folder.

Lines written in black text, with a green dot at the start, are enabled and will be copied as part of the build progress.

Lines written in grey text, with a red dot at the start, have been disabled, and will not be copied. To enable or disable a folder, click on the line for that folder, then select "Enable" or "Disable" from the Folders menu.

Check that the standard folders (News and Magazine) are showing, in the correct order and enabled (showing a green dot) before continuing. If extra folders have been left in from a previous week, Disable or Remove them before building the master disk, or the files in those folders will be included on your disk as well!

8.4 Setting the copy order for folders

The folders will be copied in the order they appear in the list. In the above image, the **News** folder will be copied first, followed by the **Magazine** folder.

To change the copy order, select the folder you wish to move, then use the **Move Up** or **Move Down** options on the **Folders** menu.

8.5 Adding (or editing) extra folders to copy

Additional folders can be copied as part of the build process. From the **Folders** menu, select the **Add** option (or press **Ctrl+D**). You will see the following screen:



Use the drop down list to select a folder type. This is purely for reference to help identify folders. You are not restricted to the entries in the list, and can type anything in this box.

Click in the **Folder Location** box, which will automatically open the **Browse for Folder** window:



Select the folder you wish to copy files from, and click on **OK**. When editing an existing folder, the browser will initially select the existing folder.

Finally, enter a suffix (max four letters) to use when renaming files to build the master disk. Ideally, each folder should have its own suffix so that the build process can be quickly verified. News folders should have the suffix “news”, while Magazine folders should have the suffix “mag”.

Clicking on **OK** will add the selected folder to the Input folders list.

8.6 Building master disks

Insert memory sticks into the USB ports on the computer tower. As you insert the memory sticks, they will appear in the **Output Drives** list.

8: CTN Master Disk Builder

Select the disk drives you wish to write the master copies to by clicking on the check-box next to the drive name. Normally you will be able to use the **Drives** menu, and click on the **select all** option to choose all memory sticks.

Warning all USB memory sticks plugged into the computer will have their data erased, and be re-formatted with the current weeks news and magazine. Ensure any data or personal memory sticks are removed from the computer before using the “Select All” option.

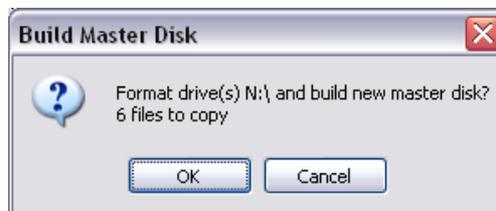
Once all the drives have been inserted and selected, click on the Build button to start copying the MP3 files to memory stick.

If a selected folder does not contain any MP3 files, you will receive a warning telling you which folder(s) had a problem:



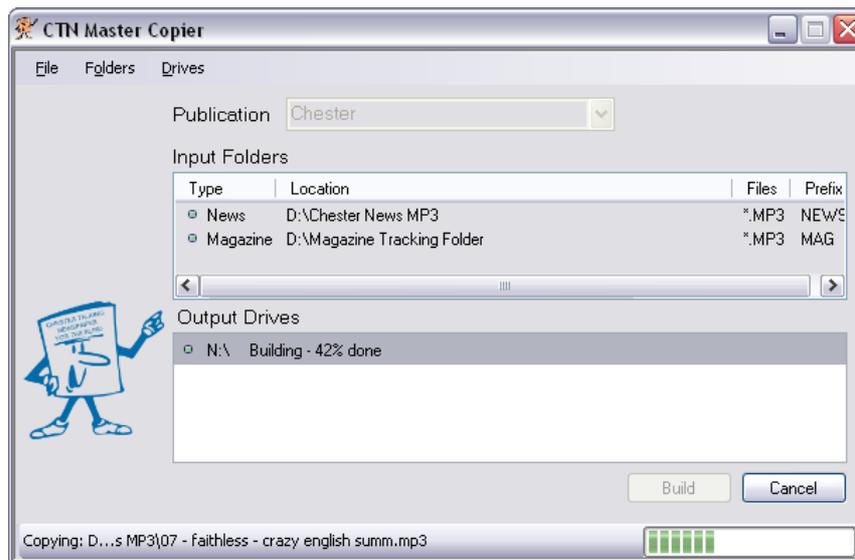
You will then be given the option to continue, or cancel the build process.

If there were no problems, or you choose to continue, the following notice will show:

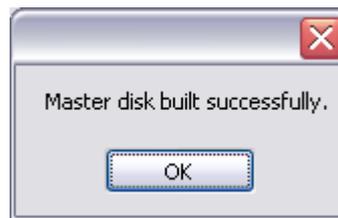


This confirms which drives you have selected to create the new master disk, and how many files have been found to copy. Click on OK, and the screen will switch to look something like this:

8: CTN Master Disk Builder



Once all the disk drives have been built, the following notice will show:



You can now remove the USB memory sticks, and check them prior to duplication.

8: CTN Master Disk Builder

