

Using the Olympus WS-110 Digi-Recorder

Model: **Olympus WS-110** (256MB, Mono, white casing)
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Introduction

The Olympus WS-110 is a digital voice recorder that can be used to record sound and then play it back again. It has a built-in mono microphone which gives good sound quality and also has a socket for an external mono microphone. The recordings are saved in the built-in electronic memory in the form of 'WMA' files which can be played back using a small built-in speaker, separate headphones or plug-in speakers. The recorder can also be plugged straight in to a computer and the recorded files then 'dragged across' to the computer to be kept for future reference, put on a CD, emailed out etc. As they are WMA files, they can be played on most computers without any special software or knowledge.

The WS-110 can hold 17 hours of 'high-quality' recording and has 5 'folders' within its memory, labelled A, B, C, D and E to allow files to be grouped together to make finding them a little easier. The recorder itself is small and slim – about 3.5cm x 9.5cm x 1cm – and uses a single AAA battery that should last 18-20 hours.

Part A - Setting it Up

A1. Inserting the Battery

Turn the recorder upside down and on the bottom you should see 2 parallel grooves next to a grey 'arrow'. Use a fingernail or similar to lightly push in the grey 'arrow', slide the cover outwards then lift it up. Put in an AAA alkaline battery (flat end first, pointy end left poking out) then push the cover down and slide it back in. If the display starts flashing then this is because it wants you to set up the time and date – go to A3, step 7 (next page) to do this.
Note: if you ever need to remove an existing battery, turn the recorder OFF first.

A2. Turning On and Off

There is via a slider switch on the side of the recorder.

To turn the recorder ON, slide the switch AWAY from the word HOLD.

To turn the recorder OFF, slide the switch TOWARDS the word HOLD

Things to watch out for:

1. If you slide the switch TOWARDS the word HOLD whilst you're **using** the recorder (eg if you're recording something or playing something back) then it doesn't turn the recorder off, it just locks all the buttons. This can be useful – eg it prevents you accidentally stopping the recording. To get back to normal, just slide the switch AWAY from HOLD.
2. After about 5 minutes of not being used, the recorder automatically goes into '**Standby**' mode in order to prolong the life of the battery. To wake it up, press any button (this has no effect other than waking it up).

A3. Setting the time & date:

The recorder puts a useful 'time-date stamp' on recordings but you need the time & date set correctly. When you first put a battery in the recorder you will be sent to step 7 below. Otherwise, if you ever need to change the time & date 'manually', simply start from step 1.

1. Switch on, if you haven't already;
2. Press the DISP/MENU button for 2-3 seconds until MENU or 'Rec Mode' appears;
3. Press << until '**Sub Menu**' appears;
4. Press **OK** (you should then see the words 'Main Menu');
5. Press >> until '**Time & Date**' appears;
6. Press **OK** to see the current time;

7. Now use the << and >> buttons to move between the date/time items – see Note (a)
8. When you get to an item that needs changing, use the + or – button to change it;
9. Use the << or >> to move across and change another item if you need to;
10. When you have finished, press **OK** to save the settings and get out;
11. Finally, press the DISP/MENU button to exit from the menu system;

Notes

- a) The **date format** is US format ie MM.DD'YY (so 03.11'09 = March 11, 2009).
- b) To **change to UK format** (DD.MM'YY), work down to step 7 above, make sure you are in the date section somewhere (ie left hand half of the row) & press DISP/MENU once or twice to get the format you want - there are 3 formats to choose from. Then press OK and DISP/MENU to get out.
- c) The **time system** is the **12-hour clock** so shows AM or PM next to the time.
- d) If you want to change to the **24-hour** clock, work down to step 7 above, make sure you are in the time section (ie right hand half of the row) then press DISP/MENU. Then press OK and DISP/MENU to get out.
- e) To check the time & date at any point, press and hold the STOP button (when the recorder is doing nothing). This first shows time & date, then time-left, then repeats.

A4. Setting the Recording Mode

The WS-110 has 3 recording modes.

- The **HQ** mode is **recommended for everyday use**.
- The **SP** mode is **useful when file size is an issue** as it produces smaller sound files - but of poorer quality than HQ mode.
- The **LP** mode gives even smaller sound files but the quality is extremely poor

To see what Mode is currently set, look on the main display when the recorder is on but doing nothing. It should show HQ, SP or LQ in small letters. To change recording mode:

1. Press the DISP/MENU button for 2-3 seconds then release it;
You should see the words 'Rec Mode;'
2. Press OK (you should then see the current mode);
3. Use the << and >> buttons to move between HQ, SP and LP formats;
4. When you see the mode you want, press **OK** to save this setting;
5. Finally, press the DISP/MENU button to exit from the menu system;

Mode	Meaining	Max recording hours	Comments
HQ	High Quality	17.5 hrs	Medium size files
SP	Standard play	34 hrs	Smaller files
LP	Long play	69 hrs	Tiny files but poor quality

A5. Setting the Microphone Sensitivity

The built-in microphone has 2 sensitivity levels:

- use '**Lo**' sensitivity ('Dictation')
for recording things close up – eg dictating in to the recorder:
good for recording one-to-one in noisy situations such as a busy classroom,
speaking right in to the recorder.
- use '**Hi**' sensitivity ('Conference')
for recording more distant sounds – eg a group round a table, or a person speaking
some distance away eg in a conference or lecture situation (but put the recorder on
something soft to prevent it picking up bumps and vibrations).

When you need to change the sensitivity:

1. Press the DISP/MENU button for 2-3 seconds until MENU or 'Rec Mode' appears;
2. Press >> until **Mic Sense** appears;
3. Press **OK** (you should then see the current setting);
4. Use the << and >> buttons to move between Dictation (Lo) and Conference (Hi);
5. When you have changed the setting, press OK to save this;
6. Finally, press the DISP/MENU button to exit from the menu system;

Part B – Recording & Playback

This section assumes that you are a tutor making recordings of learners in one way or another. Most of the information applies to other situations as well.

B1. Recording

1. **Select the folder** you want to use by pressing the FOLDER/INDEX button until the letter for that folder is shown near the top of the display.
The WS-110 has 5 folders labelled A-E and you might choose each folder for a different purpose (eg all initial assessments go into folder A, all on-course reflections into folder B). Or if you have more than one group of learners you might want to use each folder for a different group (eg Tuesday's class in A, Wednesday's in B).
2. **Check** that the recorder is in the recording mode you want – normally **HQ** – by looking for the appropriate symbol in the display (HQ, SP or LP). Also check that the microphone symbol shows the appropriate sensitivity (**Hi** or **Lo**) - see A4 or A5.
3. **Press REC** then wait a moment till the **red light** comes on – you are now recording!
4. **Press STOP** when finished.
5. You may then want to press PLAY to check that what you just recorded sounds OK.

Notes

- The recording is given the next available 'track' number in that folder. So if you already have 16 recordings in the folder, the new recording becomes track 17.
- If you want to **pause** whilst recording, press the REC button. Then press REC again to resume.

B2. Playback - basics

1. **Select the folder** you want to play back from - by pressing the FOLDER/INDEX button until the letter for that folder is shown near the top of the display;
2. **Select the track** that you want using << or >> to move through the numbers. Note: the duration of each track is shown at the bottom of the display.
3. **Press Play (OK)** to hear the track;
4. **Adjust the volume** if necessary using the VOL (+ and -) buttons. The sound comes out of the built-in speaker but you can plug headphones, or external speakers, in to the 'EAR' socket for better sound quality.

B3. Playback – tricks & tips

The following apply during playback.

Note: elapsed time is shown at bottom right of the display during playback.

To **pause** a track: press STOP. Then press Play (OK) to continue.

To **return to the start** of a track: press << at any point.

To **jump straight to the start of the next track**: press >> at any point.

To **search for a recording aurally**; listen to 2-3 seconds of the first track, press >>, listen to 2-3 seconds of next track, press >> and repeat till you find the one you want!

To **fast forward** (in jumps) through a track: press and hold >> whilst watching the elapsed time counter on the display; then release >> to listen.

To **rewind** (in jumps): press and hold <<, watch the elapsed time counter, then release.

To hear a recording a **bit slower**, or a **bit faster**: press PLAY again during playback (once for slower, twice for faster, third time to get back to normal).

B4. Index Marks – jumping around inside a recording

Index marks allow you to 'mark' a particular point within a long recording, for example when the speaker starts a new topic or when someone new starts talking. When you are listening back to the recording you can jump between Index marks in order to locate specific items. You can have up to 16 index marks in any one recording. Note that Index Marks do not transfer across if you copy a file to a computer (as they are not a standard WMA feature).

To **add an Index Mark** during **recording**, simply press FOLDER/INDEX when you want to mark a point. The recording carries on as normal but with an Index Mark inserted.

To **add an Index Mark** during **play back** (useful if you want to re-listen to a section several times) simply press FOLDER/INDEX when you want to mark a point. The playback carries on as normal but with an Index Mark inserted.

To **jump between Index Marks** during **playback**, press >> to go to the next Mark in that recording or << to go to the previous Mark. (If there is no 'next Mark' in the recording then pressing >> will take you straight to the end and << will take you straight to the beginning.)

To **delete an Index Mark** during playback, press >> to get to that Index Mark (you will then see 'INDEX' flashing at the bottom of the display) and immediately press ERASE.

B5. Erasing an unwanted recording

1. Select the appropriate folder;
2. Find the recording you want to erase.
Just to be sure, press Play (OK), listen to the first 2-3 seconds, then press STOP;
3. With that track number on display, press ERASE;
4. Press >> to proceed (or << to cancel);
5. Press OK - that recording will then be erased.

Important!

- When you erase a recording (unless it's the very last one) all the recordings after it 'shuffle back one'. So if you have 17 recordings and erase track 14, you magically get a new track 14 in its place - which is actually the 'old' track 15 that has simply shuffled back one. Similarly the 'old' 16 shuffles back to be track 15 and the old 17 shuffles back to be 16. Sounds confusing but easy to get used to.
- If you want to erase all the tracks in a folder in one go (think carefully first!), go to that folder, press ERASE once, press ERASE a second time, press >> then OK.

B6. How much time left?

To find out how much free space/time there is left on the recorder press and hold the STOP button (when the recorder is doing nothing). This first shows time & date, then time-left, then repeats.

B7. Other features

The WS-110 has a number of other features not mentioned so far. Some of these are outlined below. For full details, see the full Olympus instruction booklet that comes with the recorder.

Voice activated recording: Setting this means that it only records when someone is actually speaking – saving memory space and battery, and means you don't get long quiet sections when playing back. The full name for this feature is Variable Control Voice Actuator (VCVA).

Low Cut Filter: Setting this means that low-frequency sounds (eg projector fan noise, air conditioning) are filtered out during the recording process.

Voice Filter: Setting this will filter out both low-frequency and high-frequency sounds, but leave the mid-frequency sounds (eg voice) untouched. This works on playback.

File Lock: Setting this will lock the files you record so they can't be accidentally erased.

Part C – Copying across to a PC Computer

The audio files on the WS-110 voice recorder can be copied over onto a PC computer and moved around just like any other type of file. The computer will need to have a 'USB' port (socket) to plug the recorder in to, and have Windows ME/2000 or later as its operating system. Apple computers may require additional software (generally free to download) in order to get the full range of features mentioned here.

The instructions below assume you are using Windows XP.

C1. Plugging in to the PC

1. Turn the recorder off – eg slide the switch on the side **towards** the word HOLD (otherwise there is a risk you could damage some of the recorded files).
2. Turn the recorder over. You should see a small button marked 'RELEASE'. Hold the top of the recorder (containing the speaker) with one hand and the 'battery bulge' in the other hand.
3. Press in the RELEASE button – eg with your thumbnail – and pull the two parts of the recorder firmly apart, so that the battery part slides out of the top part. You should now be able to see the recorder's USB connector.
4. Assuming the computer is already on, and running normally, simply plug the recorder into the USB port on the computer and wait a short while for the recorder's light to flash (if, after 30 seconds, it doesn't flash, pull it out and push it back in again).

If you already know how to copy files from a USB device (eg a 'memory stick') you can do so in the normal way. If you're not sure, look at sections C2 and C3 below.

C2. Locating the recordings

When you plug the recorder into the USB port, one of two things will normally happen:

- a small window headed 'Removable Disk' appears on the computer screen OR
- it doesn't.

If the small window appears:

1. Click on the option saying 'Open folder to view files using Windows Explorer';
2. Click OK to do this.
You should end up with a list of five folders (DSS_FLDA through to DSS_FLDE) in the right hand part of the window.
3. Click on the word Folders (or an icon for this) at the top of the window.
You should now see the same five folders in the left of the window too.
4. In the left of the window, click on each of the five folders in turn.
You should see their contents (the recordings) in the right of the window.

If the small window did not appear:

1. Start up My Computer (eg click the Start button, then click on 'My Computer').
2. Click on the word Folders (or an icon for this) at the top of the window.

3. In the left of the window, click on the words 'Removable Disk' or 'WS-110'.
You should end up with five folders (DSS_FLDA through to DSS_FLDE) under it.
4. In the left of the window, click on each of the five folders in turn.
You should see their contents (the recordings) in the right of the window.

Each of the recordings has its own file name, such as WS110063, and if you point to a recording file with your mouse you should get an information box appear next to it telling you about that file (including Duration and size in KB).

If the PC has sound set up on it, double-clicking a recording file should allow you to hear it.

C3. Copying the recordings

First, decide where you want to copy the files **to** on the PC.

For example, you may want to create a separate folder on the PC for each learner, or each topic, or each class, then copy the recordings into the appropriate folders.

Creating folders on the PC

This follows on from C2 above.

1. In the left of the window, click once on the location where you want the new folder to be - eg click 'My Documents';
2. At the top of the window click File + New + Folder.
You should then see a new folder appear in the right of the window with its title (probably 'new folder') highlighted in blue.
3. Type in an appropriate name for this new folder and press Enter on the keyboard
This new name should replace the one highlighted in blue.
4. Repeat the process to create more folders if required.

Copying files from the recorder to the PC

1. In the left of the window, click on the recorder folder (eg DSS_FLDA) which contains the files you want to copy. The folder's contents should appear in the right side.
2. Check that you can see the destination folder in the left side; if not, scroll up or down until it comes into view (but don't click it). The files in the right side should still be the same as at step 1.
3. In the right side, click once on the first file then hold down the Ctrl key on the keyboard and click on the other files you want to copy (if any)
4. Grab the highlighted files in the right side by pointing at one of them with the tip of the mouse-arrow and holding down the left mouse button.
5. Keep the mouse button held down and drag the files across to the left side and 'into' the folder where you want them to go; then release the mouse button.
6. In the left of the window, click on the folder to which you have just copied the files and check they are now there (they should appear in the right side).

Renaming files on the PC

You may want to rename the recorded files to help you remember what each contains. To rename the files on the recorder before you copy them across, or afterwards on the PC:

1. Click once on the name of the file, pause, then click a second time
2. Type in an appropriate name, press the Enter key on the keyboard and the name should be changed

C4. Copying TO the recorder

You can copy any 'WMA' audio file (eg music or other track 'ripped' from a CD) from the PC to the recorder and then play it back on the recorder later on. This could be useful if you have powered speakers to plug in to the recorder to allow play-back to the whole class – but remember to observe any copyright limitations.

To copy a file to the recorder simply drag it from where it is kept on the PC and put it into the appropriate recorder folder. This leaves the original file exactly as it was and makes a copy of it on the recorder.

Note that when you come to play the new file on the recorder itself it will probably be at track 01 in that folder and any other tracks will have been 'shuffled forward one' to make space.

You can also use the recorder as a portable memory device by setting up new folders on the recorder whilst plugged in to the PC, and copying files across to it. However, once unplugged from the PC, there is no way of seeing the extra folders on the recorder itself as the display can only show the normal 5 folders (A-E). Similarly, only files in WMA format will be assigned track numbers, other types of file in the 5 folders will be invisible on the recorder's display.

C5. Safely removing the recorder

To avoid damaging data files, you should:

1. Make sure that the recorder light has stopped flashing;
2. Click on the 'Safely Remove Hardware' icon (or similar), normally at the bottom-right of the computer screen;
3. Click on the 'Safely remove USB Mass Storage Device' option that should pop up;
4. Wait till you see the 'Safe to Remove Hardware' message;
5. Unplug the recorder from the PC, find the battery-compartment part and gently push the two parts back together.

*What to do if 'device cannot be stopped right now' message appears at step 4:
First, make sure you don't have any programs running on the computer that may be using the recorder (eg Windows Media Player) and close them if you do. Then, wait 30 seconds or so and try again. If the message still comes up, the safest thing to do is to shut down the PC completely, then unplug the recorder. Alternatively you can simply unplug the recorder without shutting down – which is not the recommended way (as there's a small chance you could damage a recorded file) but doesn't normally cause any problems.*