EARLWOOD ORGANS FOR jORGAN 4_3.14

(These copious notes are to help people who are unsure about using jOrgan, and it is suggested that you print them out. If you are quite familiar with using jOrgan, you can probably afford to stop reading after Paragraph 3. However even for you, there may be one or two sections that contain useful information.)

1. This organ disposition is suitable for use with jOrgan Version 3.14 and later, and assumes the use of the "built-in" Fluidsynth sound engine. You should already have jOrgan 3.14 or later installed on your computer. (Fluidsynth is included if you tick this option during the installation procedure).

2. I suggest that you place the unzipped folder, which you could call “Earlwood_4_314” (Earlwood Organ No.4 for jOrgan 3.14) or something similar, into a special "jOrgan Dispositions" folder, which may conveniently be created in "My Documents", and which should not be confused with a folder called “dispositions” existing within the jOrgan program folder. This latter folder should be placed within the Program Files folder).

3. I suggest that you leave the downloaded zip file somewhere on your computer, so that you can always return to it later, if necessary.

4. jOrgan is designed to get you making sounds and playing music with as little difficulty as possible. It ought to function correctly "out of the box", but if this does not happen, it provides some procedures and trouble-shooting aids to assist you. Even if the program has been correctly installed and the organ disposition correctly opened, it is still possible that there are problems with the input (the keyboards on which you play etc. and the MIDI interface which sends MIDI messages to your computer for jOrgan to process), and the output (the sound engine you are using and the audio system you use to get the sound into the outside world).
It is strongly suggested that you firstly make sounds by using the built-in jOrgan Keyboard. Success here will mean that the output arrangements are working satisfactorily. There is no point continuing on, wondering about the input arrangements, if you have not firstly cleared the output of any doubts.
Open jOrgan, and open this disposition. Click on View and click on Keyboard, if the Keyboard is not already showing on your screen. Although this disposition as it comes to you is geared to be used in the first instance with the jOrgan Keyboard, it may be that for some reason (perhaps some previous use of jOrgan) jOrgan itself is not that way configured.
Select one of the stops on the console layout by clicking on it. Click on one of the keys on the jOrgan Keyboard. You should hear a note. Middle C is indicated with a grey dot. You may like to try a variety of notes, and other stops or combinations of stops. Clicking on a stop a second time turns it off.
If the sounds are basically to your satisfaction, then congratulations, your output arrangements appear to be successful, and you can probably go straight down to 5. below. However, I suggest that you read the rest of this present paragraph first, even if you don't have to do any trouble-shooting, as it describes processes which you may useful at some time or other.
If you have heard nothing, then that is a bit disappointing, and it means you have to start a process of trouble-shooting. Perhaps you should start by making sure that the computer audio settings do appear to be correct. (You may need to double-click on the Volume icon at the bottom of the screen to make sure that "Wave" is selected or not muted, and that its volume

setting is high). Then click on the jOrgan "Construct" icon, which is found at the top immediately below "View". "Construct" means "build", and it is the mode to use whenever you wish to make changes to the disposition. It was also used extensively to build the disposition in the first place. Always be aware, that no sounds are possible from jOrgan while you are in the Construct mode. When appropriate, you can return to Play mode by clicking on "Construct" once more.

When you enter the Construct mode, it is usual to see the Elements View, which is a list of the elements or building blocks which make up the disposition. They are all there, although sometimes some elements are bundled together in Groups, and are not visible until you double-click on the appropriate Group icon. The icons look like little brown packages. To close a Group list, double-click on its icon once more. If the Elements view is not showing, then click on View, and then on Elements. This is the normal way to bring up any View as needed. The View can always be closed when no longer needed, by right-clicking on the Title Tab and clicking on "Close".

If you find a small red "x" against one of the element icons, that identifies for you where there is a likely problem. These are not always easy to see, and so you should bring up the "Problems" view (click on View, Problems) to see a list of the problems jOrgan has identified. You have to correct these problems before you can expect to hear sounds. After making changes, it is a good idea to Save the disposition. And always remember to return to Play mode before you try to make sounds.

The Problems list may include "No device specified" for the Earlwood Organ No. 4 Connector. All this means is that as initially set up, this disposition does not intend jOrgan to send MIDI output messages to any other MIDI device. The warning can be disregarded. You may notice that in the Elements View what is showing there is not a red "x" but a small yellow triangle with an exclamation mark.

One common source of problems is that the "skin" has not been loaded into the Console, resulting in a black and white view of stop names and little squares, with no coloured console to be seen. Another is a failure to load the soundfont file(s) into the appropriate sound engines(s), which will certainly mean that no sounds are produced. It is unlikely that either of these problems will exist with the present disposition, as it should load these things automatically.

You may however need to select your computer Audio Device. Click "Fluidsynth Sound" in the Elements list. If the Properties View is not showing, then click on View, and then on Properties. Against "Audio device" in the Properties View you will see "Speakers (Realtek High Definition Audio)". This represents my own computer Audio Device. Click on these words, and you will see a scroll-down arrow to the right. Click on this and you will be provided with a list from which you can select whatever is appropriate for your set-up. If you have a soundcard installed, it may offer you its name, which you should select if it is currently active.

If a soundfont is not loaded, that will certainly be indicated as a Problem. Having selected “Fluidsynth Sound” in the Elements View, look at its Properties View, scroll down the list of properties as needed, until you can see "Soundfont" at the far left. Click to the far right of "Soundfont", then click on the little "3 dots area", navigate to your unzipped folder, and Open the Earlwood_4_314.sf2 soundfont file. You may like to delete all the path details, leaving just the file name and its .sf2 extension showing in the Properties "Soundfont" entry space. Then save the disposition. Warning: In my experience, jOrgan may not pick up this load into Fluidsynth, unless you save and close the disposition and re-open it.

The process you have just undertaken is the normal way to load some other soundfont into the Fluidsynth engine, or some modified version of the existing soundfont, should you wish to do this at a later time. The process is initiated by clicking on the little three dots area, after which you will need to navigate to where the new or modified soundfont is located on your computer.

A similar process is used to load the skin into the Console, if you have failed to see the coloured console on your screen. To do this you click on Console (Earlwood Organ No. 4 in the Elements View), bring up or look for the Properties View, and find the bottom left-hand entry in the Properties list, which will be "Skin". In a similar process to before, click to the far right of "Skin", then click on the little "3 dots area", navigate to your unzipped folder, and double-click on the "classic-earlwood-4" folder. Then save the disposition.

If you are having no success getting sound, it may be that there is a conflict between the version of Java which is operating and the version of jOrgan you have installed. One way to check this is to open the example.disposition found in the jOrgan folder and try to get some sounds. Then open instead the fluidsynth-example.disposition and try to get some sounds. If you have sounds the first time, but not the second, almost certainly this points to the conflict which has just been mentioned. In some circumstances you may have success if you do the following: Close down jOrgan, and re-open it by double-clicking on the jOrgan.jar file instead of the jOrgan.exe file. If you now have sounds when using the fluidsynth-example.disposition, then you should have success with the proper disposition you wish to play. However, each time you will need to open jOrgan using the .jar file. You may like to create a shortcut related to this file, which you can place on your computer desktop.

If you still have no success getting sounds, you should register on the jOrgan Forum and seek help there.

5. Having satisfied yourself that the output arrangements are giving you sounds, it is now time to turn your attention to the input arrangements: your physical keyboards etc. and the MIDI set-up. Click on "File" and then on "Customizer". Select in turn for each organ department, by means of the scroll-down arrow, the actual MIDI input Device you are using. Click on "Record". Press on the bottom note and then on the top note of that department and then click on "O.K." After completing this for each organ department, look at the windows at the right-hand side, and note that jOrgan has entered in for you the MIDI Channel numbers your keyboards are sending messages on (Channel "1" will be indicated here as a "1" etc.), and also the MIDI note ranges for each keyboard. After clicking on "Next" twice, you will need to enter the actual MIDI device you are using into the "Device" window at the top, using the scroll-down arrow to access the correct entry.
Save the disposition. You should now be able to play it normally, if you are in the Play mode. If you can't, then you should go back into Construct mode, select "Problems" in "View" and see if the problem is identified for you. Then try to remedy the problem. Something you can do at this stage is to bring up the Monitor View. This allows you to examine the input and output messages that are occurring whenever you play a note or change a stop. Hold the mouse over each of the four icons at the right-hand side, and you will have the control functions identified for you. This monitor can be of great use in trying to identify problems.

The Customizer is also used to enable jOrgan to respond to stop switch changes, piston operations and swell pedals, if your physical console sends MIDI messages when those are operated. The procedure is described in the Footnotes.

6. The entire organ can be re-regulated to your liking by adjusting the soundfont Attenuation Settings at the Instrument level, for each pair of notes belonging together as a zone (or split) - and there are thirty such for EACH STOP! This is a large task, and requires the use of a soundfont editor (e.g. The free Viena - note the one "n" in Viena - from the SynthFont website), but if you are prepared to learn how to use the editor to perform this, it is the best

way to match the organ to your loudspeaker and room characteristics, and can be quite a satisfying process. You will find my article on Attenuation Settings very useful. (http://home.exetel.com.au/reimerorgans/ART/Attenuation_Settings.htm)

A simpler way is to adjust the overall level of each stop you wish to change, by a single adjustment for the stop. This can be done by editing the disposition once you have opened it in jOrgan. Go into the Construct mode. If "Messages" are not showing, Click on "View" and then on "Messages". In the Elements View, double-click on the Group where you can expect to find the rank you wish to adjust (if the disposition contains Groups), find the list of Rank elements (look for the grey loudspeaker icon at the left of each rank), and select (click on) the rank concerned. In the Messages window, look for the line which reads "Note played set 144, set pitch, set 80" (or some other number). It is this 80 (or some other number) which can be clicked on and altered to adjust the level of the entire stop. 80 is the default setting for most ranks in this disposition; increasing it to a maximum of 127 increases the level of the stop, and reducing it has the opposite effect. I have made up a table showing the values which produce various attenuations (or amplifications) for Fluidsynth, Creative and sfz, which you may find useful. (http://home.exetel.com.au/reimerorgans/ART/Volume_Control.htm).
I suggest you print it out. There are other articles on my website you may find of interest, and the above webpage has a link to the jOrgan Index Page.

7. Don't forget to Save after making any changes to a soundfont or to a disposition. After saving, if there were changes made to the soundfont, it will be necessary to load the soundfont into the sound engine once more (see 4. above for this process). Warning as above: In my experience, jOrgan may not pick up this change to the soundfont, even after you have loaded it into Fluidsynth once more, unless you save and close the disposition and re-open it.

After you have played on your virtual organ for some time, you will want to activate the excellent combination memory and MIDI recorder features. The following instructions should take you through the process:

RECORDER
1. In playing mode (not "Construct") Click on View, then on Recorder.
2. Click on black Eject symbol (triangle "roof") at far right. You should get the "Open/Create Performance" window, and there should already be MIDI Files folders there. Open one file, and you may be able to play it immediately. To remove this piece from the Recorder, click on the Eject symbol and click on "Cancel".
3. To record a piece yourself, type in any file name you like to make up (e.g. the name of the piece you wish to record). Make sure that "Look In" is directed to the folder where you have all your Earlwood_4_314 files (the "unzipped" folder which I have suggested you place within the jOrgan Dispositions folder, itself in “My Documents”).
If you were able to play the .mid recorder files as in 2. above, then that folder should already be showing in "Look In".
4. Click on Open.
5. There should be some red dots at the left, with the name of the current disposition above one of the red dots, and the names of the organ departments above the other red dots. If this is not the case, and if you see the word "<none>" above any red dot, it may mean that the disposition Recorder referencing is not complete. Right-click in turn on any "<none>" that you see and use the editting opportunies you are given, to correct things. For example, you may wish to allocate the Console name to the top one, then allocate the manuals and pedals as you choose and as needed, to the others. Add or remove tracks to suit the particular organ (number of manuals etc.).

6. Click on the red circle at the far right to start recording, and then the black square when you have finished playing the piece.
7. If you wish to avoid losing this recording through a sudden power loss or some accident of your own making, Click on the black Eject symbol, and you will be invited to save the file. You have now saved your first Recorder file! (etc .mid)
You may choose to close the Recorder Window at this stage, without losing the MIDI file currently loaded. This will enable you to have the Console in Full View, but you can control the Recorder by means of the icons on the Console. To do this, right-click on the "Recorder" tab, and Close.
Alternatively, you may wish to open or create some other MIDI file. To do this, click on the Eject symbol at the far right of the Recorder Window, and you will be given those two options.
At this stage if you click on Cancel or you close the "Open / Create Performance" window, this will have the effect of emptying the Recorder program of its current MIDI file. Realise that when you are playing back one of these recorder files, you are free to select other stops once it starts playing, should you wish to do so. This will not affect the recording.

MEMORY
1. In playing mode (not "Construct") Click on View, then on Memory.
2. Click on black Eject symbol at far right.
3. Type in the file name of the Disposition e.g. Earlwood_4_314 if it is not already there, or select it if it is there.
It probably doesn't matter which folder it ends up in ("Look In"), but I would use the folder where you have your other Earlwood_4_314 files. In fact the "Look In" window may already be showing this.
4. Click on Open.
5. Click just after the "1" at the far left, and type in the name of your first Memory level e.g. Memory 1, and press <Enter>.
6. You should now set up some combinations: a) Turn on some stops b) Click on "SET" (it will change color to indicate that it is now waiting to register your combination). c) click on the piston you want to bring on those stops d) The "SET" will return to its normal color. e) Repeat for other combinations as needed.
7. You may even like repeat steps 5 & 6 to set up further Memory levels (2, 3 etc.), with names of your choosing.
8. Save the disposition if you wish to avoid losing these settings through a sudden power loss or some accident of your own making.

You may choose to close the Memory Window at this stage, without losing the Memory file currently loaded. This will enable you to have the Console in Full View, but you can control the Memory by means of the icons on the Console. To do this, right-click on the "Memory" tab, and Close.
Alternatively, you may wish to open or create some other Memory storage. To do this, click on the Eject symbol at the far right of the Memory Window, and you will be given those two options. If you have made any changes to the currently-loaded Memory file, you will be given the opportunity to Save them.
At this stage if you click on Cancel or you close the "Open / Create Storage" window, this will have the effect of emptying the Memory program of its current Memory file.

FOOTNOTES

a) If your physical console outputs MIDI messages when stop switches, pistons and swell pedals are operated, you will probably want jOrgan to respond to those messages. The third window of the Customizer allows you to do that. To “connect” a stop switch, select the stop switch from the list, click on its cell under “Activate”, and turn on the switch, and then click on “OK”. Next click on its “Deactivate” cell, turn the switch off, and click on “OK”. For a piston, only the “Activate” cell is relevant. (In the case of the Model 3b, the “PS” pistons which are used to transfer a manual to the Positive department are found at the bottom of the list. The top one refers to the Great manual. For these pistons you need to click on the “Toggle” cells. If you don’t have suitable pistons on your console, you may like to use the top note of each manual instead, which is why special instructions regarding the top notes were given earlier in this document. Of course, if you do have such pistons available, then you can alter the numbers of the MIDI keying ranges back to a top note of 96). Note that the piston numbering on the third window of the Customizer is not altogether clear, and you may have to experiment a little before you manage to identify all the pistons successfully. For a swell pedal, click on “Continuous” at the top of the screen, click on “Continuous Filter” and then on its “Change” cell.. Move the swell pedal to initiate a MIDI message, and click on “OK”).

The last window of the Customizer allows you to adjust various Fluidsynth settings. You may need to reduce the Gain setting if you find that the sound is distorted. Also, you may find that you can improve the operation of this computer organ by adjusting the Fluidsynth buffer size settings. Try increasing or decreasing the settings for buffer size. Click on Finish to enter the new settings, and Save the disposition (File, Save). Increasing the settings may improve the sound by eliminating unwanted crackles etc., but it may be at the expense of latency, where there is a noticeable delay between pressing the playing key and hearing the sound. Try to find a setting which satisfies you.
There are sound engines other than Fluidsynth, which may provide better latency (less delay after pressing the key), but they are not as easy to set up for jOrgan. Alternatively, if you are prepared to use the Linux Operating System on your computer, you may find that Fluidsynth gives you excellent latency indeed, depending on the set-up. There also are ways to improve the latency of Fluidsynth for Windows users. The details of these alternatives are beyond the scope of these instructions.

b) The Fluidsynth Reverberation Effect ("Reverb") does not suit all tastes, but the settings already set up for you in this dispostion, recommended by Panos Ghekas of the jOrgan community, are probably a good starting point if you wish to use the Fluidsynth Reverberation. The Fluidsynth Reverb can be adjusted or disabled altogether by going into the Construct mode and clicking on the various Reverb elements. The initial settings are: Room 0.62, Damping 0.21, Width 1, Level 0.21. Bring up the Properties view to see or adjust these values (select the various Reverb elements from the Elements list). You can experiment with these settings. Any changes should be entered normally in the Properties view, after which the disposition should be saved. To disable the Fluidsynth Reverb, simply set the Reverb LEVEL to 0. In my view there are better reverberation effects than the Fluidsynth Reverb, and perhaps your computer already has one built in, which you can use to your satisfaction.

c) You can make the console fill your computer screen differently, if it does not yet do so satisfactorily. Click on File, and then on Full Screen. In fact you may well prefer to play the virtual organ in the Full Screen mode. To return eventually to the former view (for example, if you wish to change something or Close the program), press the F11 key on your computer keyboard. You may decide that the console image is either too large or two small for your computer screen. Use the second window of the Customizer to adjust the zoom ratio (you

can fine-adjust the number using the computer number keys if you wish to). Save the disposition after setting a new value (after clicking through to Finish). You can move console elements around on the screen to improve how it looks. This may certainly be the case if your computer screen has a different display shape ratio to mine. Go into Construct Mode for this. Click on an element you want to move. You can even move groups of elements together, by firstly using the mouse to enclose them in a box. Always save after making any changes which you wish to retain.

d) You need to be aware that if at some time in the future you use a later version of jOrgan to open these particular dispositions, they will then no longer be able to be opened in jOrgan 3.14: jOrgan may convert then to the new version automatically. If this happens, it will not be the end of the world, but it may prevent you from making some special use of the disposition in its present form.
The remedy is to create versions of the dispositions which you have renamed in order to use them safely with the new version of jOrgan. To do this, COPY the Earlwood_4_314 FOLDER to another location (for example, the Desktop), rename it according to the new version of jOrgan, make a similar rename of the dispositions and of any files associated with them *by version identifier*, such as the memory files, and MOVE the new folder to where you keep your jOrgan dispositions. These renamed dispositions and their files can then be used with the new version of jOrgan. To Open with the new version, make sure that you click on “Open” and not on “Recent”. You will probably need to navigate to the new folder, and then Open the renamed disposition file. It is also likely that you will need to load the .sf2 soundfont file into the soundengine element and the “skin” folder (classic-earlwood-4) into the Console element using the procedure already described in these instructions.

e) Some jOrgan MIDI files have been provided, and a separate file ("MIDI FILES NOTES") should be consulted for the details. (You may find it helpful to copy these folders with their jOrgan MIDI files into the “later version” folders as in the last instructions of the previous paragraph, to allow you greater ease of access to those jOrgan MIDI files).

Enjoy playing the Earlwood Organs with jOrgan_4_3.14! John Reimer, December 2011