



RICHARD BRIDGE ORGAN, LONDON 1750

One manual pipe organ emulation for jOrgan software on windows, based on the real instrument in St. Ethelbert' s Anglican Parish Church in Falkenham, Suffolk, UK.



Beta 1.0 version, jOrgan 3.14 version and above
Windows XP, Windows 7 32 & 64 bit

There are some piano players who 're using a classical Clavinova (or other 88 keyboard) setup and a PC and needing a simple but effective and close to reality sounding pipe organ one manual set to practice and perform their favorite pieces of music.

With this in mind and knowing the power of jOrgan software I went searching for a real instrument that fills this demand and then to design it for jOrgan/Fluidsynth engine for Windows systems.

St. Ethelbert's R.Bridge 1750 one manual organ is the best example for this, as it is simple, has a harpsichord compass (G0 to E5), 5 ranks, from which there are 9 stops, split keyboard at C3 and the classic British shift pedal to allow organist express soft passages after forte or vice versa. Just pressing the shift pedal it closes all stops engaged at the moment and leaves only the soft Stopd Diapason 8' to play on. Good. For me it is a kind of reverse crescendo.

So, having an 88 keyboard, like Clavinova, we can play a set like Bridge (extended compass) and engage shift with the sustain pedal.

Many combinations are possible, allowing a great amount of musical repertoire to be performed.

With this in mind I tried to create a set and this is the one you just got here.

Creating sf2 bank (latest Viena <http://www.synthfont.com/>) :

Used many many things. I followed a similar technique pioneered by John Reimer in his excellent Earlwood series for jOrgan, using a real sampled pipe attack and synthesize the rest, adding many effects like the good old S&H waveform from synthesizer's LFO to emulate wind destabilizing. Real attack samples came from my Motif ES-6 library, reworked and resampled to 24/48000 with Reaper 4.14 x64, many times combining two or more in one. It took me several months to accomplish this sf2.

I'm happy with the results. A bit heavy with memory load, as I wanted a longer sustaining portion on each pipe to show the wind destabilizing, use of 3 samples per octave (C,E,G#) and so get a bit

closer to reality, not to John's high standard of economy/quality though.

jOrgan design notes :

jOrgan is a powerful weapon if one wants to build a digital/computer based pipe organ instrument and for Bridge I decided to do as much as I could.

So, there are two screens, the main, where all live controls are gathered and the settings, where the user can adjust the gain/level of any individual rank and effect and its own memory banks, as well as alternate tuning.

I tried to add any possible effect, from blower noise, tracker, which on original is very evident - so are my default settings, stop draw ect.

I added 3 reverb presets, one is my own version of St. Ethelbert's environment, as can be possible with fluidsynth's reverb. I added 3 user defined ones and a bypass button for a dry set.

Everything, well almost, has a computer keyboard shortcut, showing as little blue lettering. This comes very handy, if we just got the 88 keyboard and place the computer's keyboard just above and in front of music stand or beside anyway.

Shift control is designed to work with any physical sustain pedal of any setup, as it works on original.

I'm very grateful to R.Bridge 1750 Alpha test Team :

Jacques Levy for his invaluable help on realization of the shift pedal mechanism and other critical suggestions. Also for test playing it.

Bernd Casper for his beautiful swell/appels icons from his excellent CC1.6 Argonon, who let me use them for the shift pedal on virtual console (reversed row here for the purpose).

Erik De Schrijver for playing the Bridge and finding the best balance for tracker effects on sf2 (Viena) then to jOrgan (Customize), so they'll work on master gain adjustment too.

Marco Francesco for playing and creating all the issues occurred in the early stages of Bridge at his setup so we can work up the solutions on various problems I encountered during construction.

And..... Graham Goode , also for his Portaudio extensions to fluidsynth, allowing the use of WDMKS, WASAPI and ASIO in both 32 & 64 bit versions of windows.

Some additional notes :

Bridge's manual is programmed to work on midi ch 1, but any user can adjust to individual setup in customize page. DO NOT ASSIGN the other keyboards showing ! They are there for shift mechanism !!

Do not forget to define/set your keyboard or other device on connector page in customize, and record your sustain pedal (or other controller) movement, so shift pedal will work on your setup !

In general pistons there are two non-user defined pistons, P and F for Principal chorus and Full organ accordingly. Very basic and always used by all players :-)

Careful to see if there's Edwardian Script ITC fonts on your OS

Three disposition files to select inside :

1. The classic Direct Sound. Adjust buffer number and size to match your system. Default setting 8/512.

2. WASAPI, for those who have installed Graham Goode's Fluidsynth/Portaudio 1.1.4 Wasapi extension (win7 only). 8/256 buffers.

3. Asio4all, for those who have installed Graham Goode's Fluidsynth/Portaudio 1.1.4 Asio extension , 8/128 buffers for low latency (the one I'm using most). See credits bellow to download link.

4. I could add a Jack 1.9.8 one, but this is easy to define for already Jack 1.9.8 on windows users. Jack 1.9.8 installers are inside Graham's files.

Midi files and mp3 :

I played live and recorded on jOrgan's recorder element (midi recorder on Bridge) Boyce's Voluntary No.1 first part.

From this performance, I got the included midi file and then I sent the same sound without the reverb (bypass) to Reaper 4.14 via ReaRouteAsio driver, added Independence 3pro's Origami convolution reverb and got the included mp3 for showing the difference :-)

Also showing the shift pedal in action.

Also included, a midi file I found on the net, Rameau's Tamburines. Many notes..... probably for more hands, but I have much fun hearing it on the Bridge :-D

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I hope you'll find St. Ethelbert's Bridge set useful.

Please enjoy.

Panos K. Ghekas, Athens, Dec 2011

Credits:

Jacques Levy : <http://jlmonsite.chez.com/MonSite/music.htm>

Bernd Casper :

[http://sourceforge.net/apps/mediawiki/jorgan/index.php?title=Bernd Casper BCA%27s dispositions](http://sourceforge.net/apps/mediawiki/jorgan/index.php?title=Bernd_Casper_BCA%27s_dispositions)

Graham Goode's extensions and other gems :

<https://skydrive.live.com/?cid=c6dd879f60fadf98&sc=documents&wa=wsignin1.0#cid=C6DD879F60FADF98&id=C6DD879F60FADF98%21387&sc=documents>

Photos :

National Pipe Organ Register UK, <http://www.npor.org.uk>

D00265 version 3.1

www.suffolkchurches.co.uk Simon Knott © 2006

Listen to the real instrument :

- 1.http://www.npor.org.uk/cgi-bin/NPaudio.cgi?Fn=FlashPlay&rec_index=D00265&Code=2&No=1
- 2.http://www.npor.org.uk/cgi-bin/NPaudio.cgi?Fn=FlashPlay&rec_index=D00265&Code=2&No=2
- 3.http://www.npor.org.uk/cgi-bin/NPaudio.cgi?Fn=FlashPlay&rec_index=D00265&Code=2&No=3



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