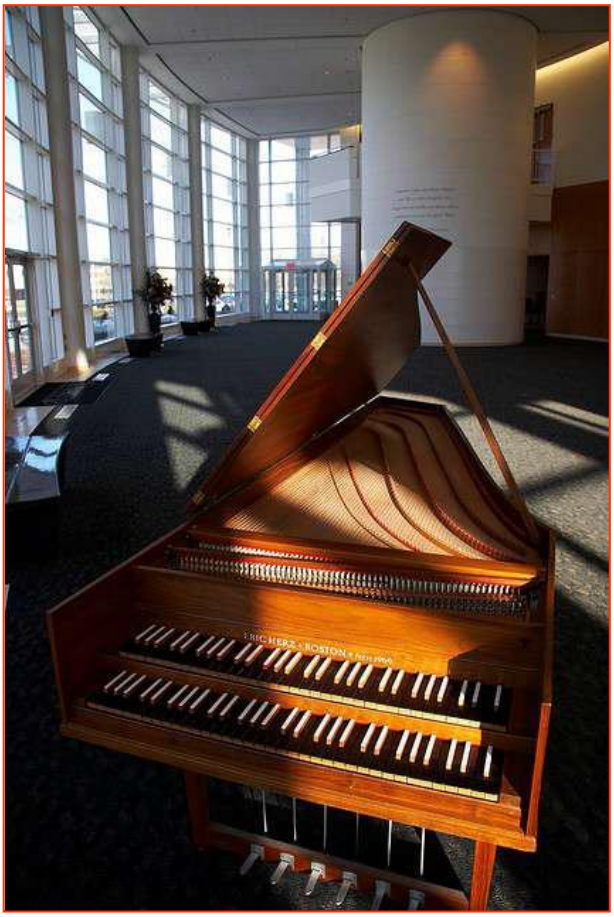
# Grand Concert Harpsichord 2.03



## for jOrgan 3.20
## created by
## Panos Ghekas (1962-2015)

**published posthumously by Mark Bugeja MD and Pastor Paul Stratman in remembrance of an exceptional artist, musician, lawyer and friend.**

The "Grand Harpsichord" is constructed of samples resynthesized from "Campbell's Harpsichord." The disposition is in the tradition of the "Landowska style" harpsichords built by the Pleyel company. "Flemish Harpsichord" voices are accessible through a bank-switch filter. The sounds were obtained from "Loofa's Clavecin" samples, obtained from "freesound."

http://www.freesound.org/packsViewSingle.php?id=1491

The buff sounds were made with filters using techniques learned from John W. McCoy's "Hpschd" soundfont. On a real harpsichord, the buff sound is made by raising or lowering felt or leather pads onto the strings.

The nasat sound was made by resynthesizing the samples with Spear, lowering the fundamental harmonic –6 dB and raising the third (quint) harmonic +10 dB. On a real harpsichord, the nasat sound would be made by a special jack placed closer to the end of the string.

My soundfont uses the same bank numbering system as the McCoy soundfont. There is no "Muselaar" or combinations.

### Temperaments

Several temperaments are available in the disposition. More are available in the "Fluid Tunings" menu. Even more temperaments, plus some history can be found at http://www.dolmetsch.com/musictheory27.htm.

**Pedal Harpsichord**

The pedal division is modelled after the John Challis Harpsichord used by E. Power Biggs in "Bach on the Pedal Harpsichord." (Biggs also recorded the Bach trio sonatas, concerto transcriptions and Scott Joplin rags on the Challis harpsichord.) The Challis Harpsichord had a venetian swell on its pedal division. Experience in playing showed me volume control over a pedal division is necessary and useful. The sounds accessed are the same as for Manual I, although they are separate ranks in jOrgan.

A console screen without the pedal stops can be used if they are not needed.

**Octave Shift**

The Octave Shift switch transposes the keyboards down an octave to accommodate harpsichord literature that goes below C1. (Hopefully the music doesn't also go above C6!)

**Two Ways of Controlling Registration**

Registration can be controlled in two ways. First, the individual stops and their modifiers can be drawn. Activators that control the stops in the manner of the pedals of a Landowska style harpsichord for hands-free registration changes. The "Buff" activator for manual I puts buff on 16', 8', and 4' together. Any activator also engages Manual II's 8' stop. My assumption is that the Manual II 8' choir would always be engaged since it is the only choir on Manual II. The "Landowska Pedal Activators" do not control the optional pedal division. Registration should be done either with stops or activators. A combination of the two will only confuse the player. Activators light up when selected. The corresponding stops also move when selected through activators. All can be cancelled by the "C" button.

**Transposer**

The jOrgan disposition has a 5 step transposer that displays the pitch of A rather than steps up or down. It uses pitch bend commands instead of a key shift so that each temperament will keep its character.

**Rank modifying switch-filters**

I decided to make the buffs and nasat as rank modifying switch filters rather than independent stops that controlled ranks. I felt that this more closely reflects the function on a real harpsichord.

**New in version 2.03**

Version 2.03 features MIDI links and controls for external reverb devices. I own an Alesis Midiverb 4. The "Edit A" and "Edit B" controls correspond to the controls on the Midiverb 4. Program 117 ("Small room for background vocals") will automatically come up when the connector is referenced to a Midverb 4. If you do not not have external reverb, the virtual

harpsichord will function just as well. The Fluidsynth Reverb controls can be adjusted manually to simulate small room or concert hall acoustics.

**Tips on Registration**

Some of the same principles used in organ registration apply. The 8' stop is the basic registration. Add 4' for brightness, 16' for depth.

Use the 8' on Manual II and couple it to Manual I with Manual I's 4' stop for a lighter 8 + 4 combination.

Use the Nasat on manual II coupled with the 4' on Manual I for a different effect. Use 16' and 4' on Manual I for a hollow, nothing-in-the-middle sound.

It seems as if Pleyel "Landowska" type harpsichords were registered with the pedals, and typically had seven. Lower 16, 8, 4, and Buff (on all three) Upper 8, Nasat and Buff. One pedal scheme I saw listed Lower 16, 8, 4, Buff, Coupler, Upper 8, Nasat. I decided to make it possible to apply Buff independently to the Lower registers.

Many authorities say that a buff stop should be used alone. (In other words, don't couple Manual II's 8' without buff to Manual I's 8 with the buff) It doesn't really add anything.

On the other hand, using the stop with the buff on can have an interesting sound if a higher pitch stop is used without buff. For example, 16 with buff, 8 without, or 8 with buff, 4 without. To my ear it is a similar principle to constructing an organ plenum with the principal on top and flutes on the bottom. The independent buffs on Manual I make such a registration possible.

Manual I's 8' coupled with Manual II's 8' will give you a full sound with a very slight celeste effect since the "strings" have slightly different timbres.

Use 8' with buff on Manual II as accompaniment and play the solo with 8' without buff on Manual I …. Or try it the other way around.

**For your reference:**

A description of the Pleyel "Landowska" style harpsichord from the British Harpsichord Society: www.harpsichord.org.uk/

Many other links and interesting information: http://www.harpsichord.org.uk

John W. McCoy's Harpsichord Soundfont (Includes an essay on the rationale behind the soundfont): http://www.realmac.info/hpschd2.htm

Recordings of Wanda Landowska:
http://www.archive.org/search.php?query=creator%3A%22Wanda%20Landowska%2C%20harpsichord%22

Harpischord Photos: http://harpsichordphoto.org/

Dolmetsch Online: Valuable article on pitch and temperaments. Includes a temperament calculator. The historic temperaments in this soundfont were derived from or checked against the tables from Dolmestch:
http://www.dolmetsch.com/musictheory27.htm

Baroque CDs, The Pedal-Harpsichord in Germany: An informative article, and some CDs of pedal harpsichord recordings for sale:
http://www.baroquecds.com/pedalharpsichord.html

**Acknowledgements**

The "Grand Concert Harpsichord" is constructed of samples resynthesized from "Campbell's Harpsichord," used with permission (http://www.hammersound.net)

"Flemish Harpsichord" voices are from "Loofa's Clavecin" available at "freesound"
http://www.freesound.org/packsViewSingle.php?id=1491

Buff effects modified from "Hpschd" by John W. McCoy
http://www.realmac.info/hrpschrd.htm

Jack drop sounds are from MT_Clavicembalo_884 by Matteo Tocchetti, used with permission. (http://www.hammersound.net)

The photograph of the Landowska-style harpsichord is by Vaughan Nelson, from his Flickr account, (http://www.flickr.com/photos/nelsva/91817586/) Creative Commons

Have fun.

Paul C. Stratman