

ORGAN CONTROLLER SOFTWARE

USER'S MANUAL

Friday, May 18

Pascal Leray

pascalleray.ftd@free.fr

<http://pascal.leray.free.fr>

SUMMARY :

Chest controller is dedicated to organbuilders who want to provide cost effective, flexible tool for controlling small or large pipe organs. It supports a simple set of hardware boards, connected to a standard PC parallel port :

- 8 keyboards/pedal
- USB or MIDI inputs.
- 64 or 4x64 power outputs boards

Plus a low cost PC and one or two touchscreens

That's all !

Stops are described by a simple text file, "options.wri" with separated pictures for reed pipes. This file contains also the port address of each stop.

STOPS CONTROL :

Stops are simulated by symbolic pictures, which can be easily modified by organbuilder or organist. Organist can draw or remove just by a simple hit on the touchscreen. Of course, organ controller can also be driven by standard drawstops.

Each register can be switched in 16' 8' 4' 2' by using the corresponding virtual keys.



REGISTRATIONS :

Each organist can access to his own registration set, with unlimited number of presets.

These registrations can be read and stored in an unlimited number. Each registration can be named by organist.

Reset, Decr and Incr virtual buttons can be used to reset, decr or incr registration.

Registration # is always displayed on the top of the screen.



TRANSPOSITOR :

Can be activated by the use of the left or right arrows on the keyboard. Of course, special buttons can be proposed on the screen to be hit by organists.

ASSISTED TUNING :

The PC keyboard, or any mini keyboard can be used for assisted remote tuning. This keyboard can be hold inside the organ divisions, and pipes can be turned on or off by switching the +,- , up or down arrows. Space bar stops the selected pipes. Sample keyboard controls can call registers : for example 'B' for bourdon 'P' for Prestant, and so on.

COPY-PASTE functions :

Each registration can be copied and paste on another registration very easily with the copy and paste buttons.

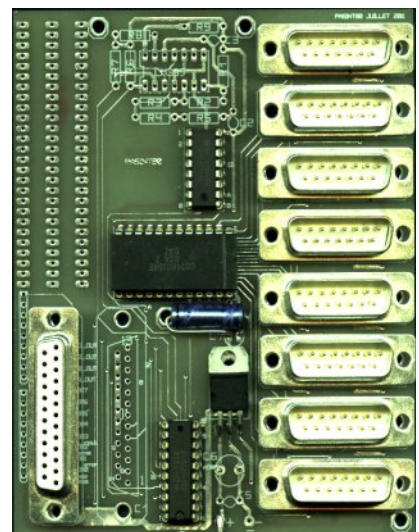


KEYBOARDS :

Organ controller can support any kind of keyboards :

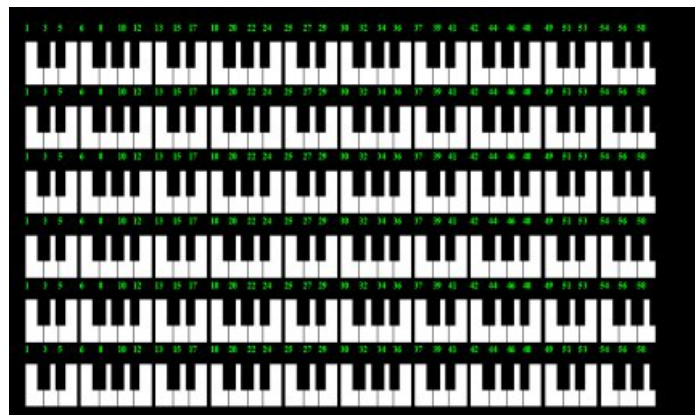
- Classic organ keyboard with our 8 keyboard input board on parallel port or :
- Same card with 8 keyboards inputs and MIDI outputs
- USB MIDI keyboards with our direct MIDI software interface included in organ controller.
- MIDI keyboards with our direct MIDI software interface included in organ controller.

Unlimited number of keyboards (several cards can be added).
Keyboards are automatically detected when plugged on a USB/MIDI interface.



VIRTUAL KEYBOARDS :

Virtual keyboard is visible with one hit the corresponding key.



OUTPUTS :

Our 64 or 4x64 boards can be plugged to the PC, via the standard PC parallel port. Addresses are defined on the "options.wri" file.

- 64 outputs boards can drive unlimited registers. Up to 7 Amps per output. For heavy duty outputs.



- 4x64 output boards can drive unlimited registers with darlington on each magnet. Integrated darlington can also be put directly on the boards.

TREMULANT :

Can be controlled by selecting first a stop, then hit the key “tremulant”. After, control the tremulant velocity by the appropriate slider.

EXPRESSIVE-SENSITIVE KEYBOARD CONTROL :

Given a velocity value sent by the keyboards, Organ controller can compute for each hit key a registration, via a registration expressive table, which can be defined by organbuilder or organists.

VIRTUAL REGISTERS :

Using text files, users can define virtual stops : that is to say : for each keyboard key, one can associate any pipe of the windchest, as soon as each pipe is directly accessible by organ controller.

With this feature, one can define any kind of virtual register, by the user of existing real pipes, associated to keyboard keys, for example : mixture stops.

ANNEX 1 : Options.wri file (example)

PORT_BASE 378
PORT_BASE_HALL 378
SCREENS 2
STOPS 24
BOURDON ;FF;CARTE1X64;FOND
FLUTE 4 ;F7;CARTE1X64;FOND
FLUTE 8 ;CF;CARTE1X64;FOND
MONTRE ;EF;CARTE1X64;FOND
DULCIANE ;C7;CARTE1X64;FOND
NAZARD ;D7;CARTE1X64;FOND
SOUBASSE ;7F;CARTE1X64;FOND
PRESTANT ;27;CARTE4X64;FOND
QUINTATON ;3F;CARTE4X64;FOND
DOUBLETTE ;2F;CARTE4X64;FOND
REGALE ;AF;CARTE4X64;ANCHE
HAUTBOIS ;B7;CARTE4X64;ANCHE
TROMPETTE ;E7;CARTE1X64;ANCHE
VOX HUMANA ;DF;CARTE1X64;ANCHE
FLUTE_HARM ;4F;CARTE1X64;FOND
BOURDON4 ;A7;CARTE4X64;FOND
GAMBE ;BF;CARTE1X64;FOND
CORNET ;00;CARTE1X64;FOND
PLEINJEU ;00;CARTE1X64;FOND
FOURNITURE ;87;CARTE4X64;FOND
CROMORNE ;0F;CARTE4X64;ANCHE
VCELESTE ;07;CARTE4X64;FOND
TROMPETTE4 ;37;CARTE4x64;ANCHE;T
TIERCE ;47;CARTE4x64;FOND;t

ANNEX 1 :

VIRTUAL REGISTER EXAMPLE
furniture dax 4 rank n°1 (keyboard GO)

" l= LARIGOT " " p= PRESTANT4 " M=MONTRE

1	32 M 37 M 44 M
2	33 M 38 M 45 M
3	34 M 39 M 46 M
4	35 M 40 M 47 M
5	36 M 41 M 48 M
6	37 M 42 M 49 M
7	38 M 43 M 50 M
8	39 M 44 M 51 M
9	40 M 45 M 52 M
10	41 M 46 M 53 M
11	42 M 47 M 54 M
12	43 M 48 M 55 M
13	37 M 44 M 49 M

14 38 M 45 M 50 M
15 39 M 46 M 51 M
16 40 M 47 M 52 M
17 41 M 48 M 53 M
18 42 M 49 M 54 M
19 43 M 50 M 55 M
20 44 M 51 M 56 M
21 45 M 52 M 57 M
22 46 M 53 M 58 M
23 47 M 54 M 59 M
24 48 M 55 M 60 M
25 49 M 56 M 61 M
26 50 M 57 M 62 M
27 51 M 58 M 63 M
28 47 M 52 M 59 M
29 48 M 53 M 60 M
30 49 M 54 M 61 M
31 50 M 55 M 62 M
32 51 M 56 M 63 M
33 52 M 57 M 64 M
34 53 M 58 M 65 M
35 54 M 59 M 66 M
36 55 M 60 M 67 M
37 56 M 61 M 68 M
38 57 M 62 M 69 M
39 58 M 63 M 70 M
40 52 M 59 M 64 M
41 53 M 60 M 65 M
42 54 M 61 M 66 M
43 55 M 62 M 67 M
44 56 M 63 M 68 M
45 57 M 64 M 69 M
46 58 M 65 M 70 M
47 59 M 66 M 71 M
48 60 M 67 M 72 M
49 61 M 68 M 73 M
50 62 M 69 M 74 M
51 63 M 70 M 75 M
52 64 M 71 M 76 M
53 65 M 72 M 77 M
54 66 M 73 M 78 M
55 67 M 74 M 79 M
56 68 M 75 M 80 M

END