

# Physis **UNICO / SONUS / OUVERTURE**

## Release History

### Release 1.14.16

#### Implementations:

- It is now possible to create custom organ models with a number of registers greater than 128.
- PHYSIS EDITOR release 1.11.0, designed to manage a number of registers greater than 128.

#### Compatibility with O.S. versions

Editor Version	O.S. Version
1.7.1	1.6.0 - 1.12.3
1.8 .1	1.13.0 - 1.13.3
1.9.0	1.13.4
1.10.2	1.14.0 - 1.14.15
1.11.0	1.14.16 and above

#### Improvements:

- VPI sensor temperature management depending on the PIPES/DIGITAL function status
- the Zimbelstern voice is now handled like any other orchestral voice in the management of combination memories

### Release 1.14.15

#### Bug Fix:

- Improved communication with VPI (Viscount Pipe Interface), now working without (rare) activation delays
- now SHORT OCTAVE and KEYBOARD TOUCH settings follow the KEYBOARD INVERSION correctly

### Release 1.14.14

#### Improvements:

- Improved communication with Physis Editor, now working without loss of connection on Windows 10
- Strengthening of the voice arrangement modification procedure on numerous actions from Physis Editor
- VPFS loading no longer possible with insufficient internal memory

#### Bug Fix:

- Correction of the bug introduced in 1.14.13, occasionally causing the organ to lock up about 1 and a half hours after switching on

## Release 1.14.13

(from version 1.14.8 to version 1.14.13 some functionalities and changes necessary for custom organs have been implemented)

### Implementations:

- The blocking of the MIDI input has been eliminated when the Editor is connected. In this way it is now possible to control the organ through the Editor and simultaneously send messages to the organ via MIDI input
- Added a MIDI SYSEX input control for setting the LOCAL ON/OFF of the registers

### Improvements:

- The management of electromechanical controls has been improved and optimized and their movement is now faster and better synchronized

## Release 1.14.7

(from version 1.14.3 to version 1.14.7 some functionalities and changes necessary for custom organs have been implemented)

### Implementations:

- Voice exchange via Physis Editor: now the sysex code is moved and adapted, according to the numbering rules of multiple voices of the same type
- Added a service parameter to include the thumb pistons of the divisional memories in the KEYBOARD INVERSION (applicable in versions with divisional memories)
- Added a "couplers in crescendo" parameter with functionality similar to "couplers in divisionals" (accessible on the PROG. FUNCTIONS page)

### Bug Fix:

- Fixed occasional problem of incorrect CRC error indication on modules with 4 DSPs
- Improved handshake with Physis Editor (occasional crashes on models with many voices)

## Release 1.14.2

### Bug Fix:

- when upgrading from O.S. 1.14.0 (or 1.14.1) there may be a possible organ lock-up due to a software marginality which was introduced with O.S. release 1.14.0. To prevent the lock-up when upgrading from 1.14.0 (or 1.14.1) follow this procedure:
  - o just after inserting the USB stick into the organ USB port, enter the SEQUENCER page, wait until the "please wait" pop-up disappears, be sure to read "USB PEN DRIVE" on the bottom reverse line, and exit the SEQUENCER.
  - o Then, to load the new software, just follow the standard "OP.SYS. UPGRADE" procedure.

## Release 1.14.1

### Bug Fix:

- External routing error on external outputs 17 and 20 (or 25 and 28), that under certain conditions could be silent (bug introduced with 1.14.0).

## Release 1.14.0

### Implementations:

- Some external MAIN outputs (up to a maximum of 4) can be assigned to the Subwoofer function; for each Sub output it is possible to assign a group of other outputs. For example, output 8 may be the SUB output for outputs 1,2,3,4. Programming is done from the routing menu. This is possible in organs with a number of outputs greater than 4, i.e. in the case of 12 or 20 outputs (or 28 for custom organs)
- PHYSIS EDITOR release 1.10.0
  - o It is possible to turn on and off some actions on each stop from the "edit parameters" menu. They are: Coupler, Reversible, Tremolo, Expression.
  - o It is possible to change the name of each stop
  - o Added the layout of some models not present in the previous versions

### Compatibility with O.S. versions

Editor Versions	O.S. Versions
1.7.1	1.6.0 - 1.12.3
1.8 .1	1.13.0 - 1.13.3
1.9.0	1.13.4
1.10.0	1.14.0

### Improvements:

- Check enough internal memory available for a release update.

### Bug Fix:

- External routing error in POLY 2/4/6 mode for Mixtures
- External routing in POLY 6 mode for voices of the "Viola 8" type to avoid overlapping with other 8 " voices
- Ghost notes added on some (rare) keyboards.
- Voice name visualization error on the internal and external routing pages, in the case of a mixed stop and orchestral voice selected

## Release 1.13.1

### Implementations:

- Added four selectable CUSTOM temperaments, configurable note by note.
- Implemented the option to have mixed registers (digital - pipes) with a configurable split point between the digital and pipe parts.
- External Windchests: added POLY mode 2/4/6 for external outputs for the MAIN section.
- Introduced a Reverb Volume control on the external subwoofer output.
- Activation of the combination memories via MIDI IN through special CChange and PChange messages on channel 16.
- It is now possible to extend the external outputs to 28, only for custom organs; this possibility is conditioned to have only 2 internal channels (does not apply for example to Sonus models).
- PHYSIS EDITOR release 1.8.0: adapting to the latest innovations: setting the second tremolo, choosing type of detune for the Celeste voices, choice of which tremolo (1st or 2nd) for each voice, new windchests, 28 external outputs ... Added the layout of many models not present in the previous version 1.7.1.

Compatibility: up to O.S. version 1.12.3 use the 1.7.1 version of the editor. From O.S. version 1.13.1 use the 1.8.0 version of the editor

#### Improvements:

- Keyboard type also configurable via software menu.
- System clock: reporting of broken chip or date/time conceivably wrong.
- Improved graphics on the page: KEYBOARD INVERSION
- During the link with Physis Editor can now be sent notes on/off via MIDI IN.
- Control Monitor in service page: improved visualization of the note on/off velocity
- Save / Recall the state of the organ at the entrance/exit from the sequencer: now included status of AP, OS, ENC, MIDI TO, MIDI SOLO.
- With the long pressure of the EXIT button you can return to the MAIN PAGE (if possible).
- Keyboards velocity: implemented new "Hard" curve and new curves for the AWK keyboards.

#### Bug Fix:

- Removed restoring the default status for the amplification Tab, following the resynchronization events as a result of communication errors.
- Notes and oscillators managing: more robust rewriting of messaging to the sound modules and of the detection and forced shutdown of any oscillator remained in unexpected state.

## Release 1.12.3

#### Improvements:

- Midi messages: Program Change, Bank Select MSB and LSB are now stored also in the HR memories.
- Proper handling in case of loading a midi file of zero length.
- More strict control over the OS upgrade file name, it must begin with "upgrade\_kit\_to\_"

#### Bug Fix:

- Panning POLY: proper L-R channel assignments in the headphones, previously reversed with respect to amplification and the other types of panning.

## Release 1.12.2

#### Implementations:

- Added a new Automatic Pedal mode: "PD / KEYB MONO", by means of which the function of Monophonic pedal is activated from any keyboard.
- Added a new "lock" mode for the memories of the first bank only.
- Added the "auto-repeat" mode on pages: Voice List, Voice Volumes, Voice Change, Setup, Utility and Midi, File List, Sequencer File List, Song List, and other.
- Functions not shown on display when they are not present on the specific model (Reed Cancel, Cancel Mixture, AP).
- Implemented the activation / deactivation of the Crescendo pedal through a special piston (if present).

## Release 1.11.0

### Implementations:

- The "Air Pressure" function, which reproduces the subtle pitch fluctuations of the instrument in response to the quantity of air absorbed by the pipes, has been improved and new features have been added. More in detail, the following points have been implemented:
  - enhancement of the algorithm, for better accuracy and realism;
  - finer control of the effect intensity (8 levels instead of 4);
  - introduction of five different operating modes, each simulating the behaviour of the "wind system" of a particular type of pipe organ (SET-UP / AIR SUPPLY CONFIG / MODE);
  - possibility of adjusting the effect intensity for each division separately (SET-UP / AIR SUPPLY CONFIG / INTENSITY).

### Improvements:

- Midi Out: introduced standard general midi messages for the master tuning and temperament.

### Bug Fix:

- Remote control: proper viewing of the percentage of the playback speed shown on the display. To make effective the bug fix you need to update the software of the remote control

## Release 1.10.0

### Implementations:

- Introduced a second virtual MIDI, only for transmission, called "MIDI B". Messages related to "MIDI B" are transmitted via the MIDI OUT connector along with messages related to "MIDI A". "MIDI B" is fully programmable as "MIDI A" (TX Channel, Program Change, etc.).
- Introduced a new parameter "Detune Type" on Celeste Stops that lets you choose between 3 different patterns of detuning.

### Improvements:

- "Automatic Pedal" is limited to the keyboard note G4, regardless of the value of the transposer.

## Release 1.9.0

### Implementations:

- Introduced a second "Tremulant", with editable parameters in the SET-UP page as per the first tremolo. For each register (excluding pedal voices) of each unlocked style, you can choose which one

tremolos to activate. The control panel (drawknob / tab) handles both tremolos. Only on request it is possible to add a second dedicated control (tab / drawknob / piston).

- Introduced a three states parameter for controlling the functionality of the couplers on the MIDIOUT and on the internal ORCHESTRA. Now you can choose whether to send only the actual notes, or even the notes generated by the couplers between manual or finally the notes generated by any coupler.
- Introduced the action range of the expression pedals between 4 values: 12db / 18db / 24db / Full (choice in service page)
- Introduced a parameter of left / right balance on the side amplification (only on equipped models) on page INT. AMPL. TUNE-UP
- Introduced the free assignment of the ENCLOSED function to the expression pedals / organ sections (in SETUP page / ENC.CONFIGURATION)
- It is now possible to have independent memory banks for general and divisional memories (only on request)

## Release 1.8.2

### Implementations:

- Introduced a second "Short Octave" mode
- Selection for each of the manuals and the pedal board if you want to play with short octave and in what mode
- Differentiation of the unlock password from the service password

### Bug Fix:

- Fixed misalignment between the position of the master volume pot with linked levels, in the case of "restore factory settings" or files loaded
- Correction of the Pythagorean temperament tuning
- Fixed routing of internal amplification in the "POLY" mode

## Release 1.8.0

### Implementations:

- More flexible management of the "KEYBOARD INVERSION" feature: now you can perform any inversion between manuals (this flexibility is especially useful on 4 manual instruments).
- A more complete functionality of the AMPLIFICATION tabs.
- More comprehensive management of the volume potentiometer which can now be completely unlinked. Management with remote control follows accordingly the programming.
- More flexible management of the Expression and Crescendo pedals.
- Functionality (on customer request) "ALTERNATIVE SET OF CONTROLS" (a piston / tab / thumb-piston which switches the functionality of a group of other tabs / pistons / thumb-pistons).

### Improvements:

- Management of possible overcurrent status on the USB port in case of short circuit or device failure.
- Fixed sysex strings related to the "coupler" status on the SOLO manual (IV) when using the sequencer.
- Better distribution of reverberation on the internal amplification.
- Ability to upload files VPFs also of previous OS versions and to upload from a USB stick containing an alternative timbre map and, if needed, a folder with supplemental voices.

### Full support to new models with surround amplification:

- Management of the side diffusion channels with related setting of volume.
- Management of the front channels with related setting of volume.



## Release 1.7.0

### - New Mixtures and Cornets

We carefully reviewed the Mixtures and Cornets models, now able to provide a much more versatile character of the sound and a much improved degree of realism, overall in the baroque compositions. In order to preserve the actual voicing structure of instruments you have, the new mixtures will be provided as additional entries in the library so please manually select them once the upgrade is installed. (Below you can find the list of the new voices)

### - New Reeds

The Reeds model has been improved in order to give a better "baroque footprint" where needed. As above, to hear the improvements, you'll be requested to manually select the new voices from the library after the upgrade has been performed. (Below you can find the list of the new voices)

### - Sequencer

A double resolution of the "tempo" value has been implemented. That will allow a more precise adjustment of the BPM during playback.

### - File Manager

The "wildcard" selection of files has been introduced in the "FILE DELETE" menu. That will allow the user to delete "all-of-a-kind" files in a single operation.

### - Bug Fixes

- Tremolo: Tremolo too slow on the CL2
- Hanging notes: Orchestra voices that hangs while passing from a layer of two to a single sound.
- Sequencer: Wrong tempo value recorded in certain condition

## MIXTURES / CORNETS / SESQUIALTERA

The sound of the new Mixtures and of the new Sesquialtera has been significantly improved to make it more suitable for the performance of Baroque music: the speech is prompt and direct, while the tone is clear and transparent.

The new Baroque Cornets have got a well-characterized attack and a clear sound.

### MIXTURES MANUAL

GrossMixt V	lowest rank at C1: 2'
MixtSLB IV A	lowest rank at C1: 2' rank composition after German organ builder Gottfried Silbermann (1683-1753)
MixtSLB IV B	lowest rank at C1: 1 1/3' rank composition after German organ builder Gottfried Silbermann
MixtSLB V	lowest rank at C1: 1 1/3' rank composition after German organ builder Gottfried Silbermann
Scharff IIIA	lowest rank at C1: 1'
Scharff IIIB	lowest rank at C1: 1' higher composition than "Scharff IIIA"
Scharff IV	lowest rank at C1: 2/3'
TerzMixturVI	lowest rank at C1: 1' contains a third-sounding rank, common in Baroque organs of Central and Southern Germany
Zimbel III A	lowest rank at C1: 1/2'
Zimbel III B	lowest rank at C1: 1/4'

### *CORNETS / SESQUIALTERA MANUAL*

Korn BRK III	composition: 2 2/3' - 2' - 1 3/5'
Korn BRK IV	composition: 4' - 2 2/3' - 2' - 1 3/5'
Korn BRK V	composition: 8' - 4' - 2 2/3' - 2' - 1 3/5'
Sexquialter	composition: 2 2/3' - 1 3/5'

### *MIXTURES PEDAL*

HintersatzIV	composition: 2 2/3' - 2' - 1 1/3' - 1' without breaks
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## **REEDS**

In designing the reeds, particular care has been taken to make high frequencies sound clear and bright. Each stop has been carefully voiced note by note in order to reproduce the slight differences in tone, attack and release between one note and another that are always present in real pipe organs.

### *REEDS 16' MANUAL*

Dulcian 16	very useful for Baroque music, pipes with narrow-scaled wooden resonators
Fagott 16	refined tone, useful both as solo and as chorus reed
Trompete 16	German sound, bright but not intrusive

### *REEDS 8' MANUAL*

Oboe 8	light and colourful sound
Trompete 8	bright and vivid sound
Trommet 8 A	rich and vivid tone, voiced in North German Baroque style
Trommet 8 B	voiced in North German Baroque style, but lighter than "Trommet 8 A"
TrompttHarm8	French sound, pipes with double-length resonators for a full-bodied, powerful tone
Vox Humana8A	very expressive sound, to be used preferably with the tremulant
Vox Humana8B	voiced in North German Baroque style, with a thinner and more metallic tone than "Vox Humana8A"

### *REEDS 4' MANUAL*

Clairon 4	bright French sound
Schalmei 4	sharp tone, voiced in North German Baroque style

### *REEDS 16' PEDAL*

Dulcian 16	see <i>REEDS 16' MANUAL</i>
Fagott 16	see <i>REEDS 16' MANUAL</i>
Posaune 16	dark and powerful sound, voiced in North German Baroque style
Trompete 16	see <i>REEDS 16' MANUAL</i>

### *REEDS 8' PEDAL*

Trompete 8 A	German sound, pipes with wide-scaled resonators
Trompete 8 B	see <i>REEDS 8' MANUAL</i> , "Trompete 8"
Trommet 8 A	voiced in North German Baroque style, pipes with wide-scaled resonators
Trommet 8 B	see <i>REEDS 8' MANUAL</i> , "Trommet 8 A"

### *REEDS 4' PEDAL*

Clairon 4	see <i>REEDS 4' MANUAL</i>
Klarine 4	soft trumpet sound, especially useful as solo stop
Schalmei 4	see <i>REEDS 4' MANUAL</i>
Trommet 4	bright sound, voiced in North German Baroque style