

CECILIA module – German Baroque: instructions for use

Description

MIDI expander with twenty true registers and three couples containing real organ sound samples. The registers are divided into three groups: pedal board, lower manual, upper manual. The choice of registers is carried out by means of mechanical drawknobs with magnetic arrestment of positions; all functions and settings are accessible via display and cursor buttons.

Dispositions:

The stops consist of the top quality samples of **Sonus Paradisi** project, the disposition is based on the North Germany baroque style.

Pedal

- Subbass 16'
- Bassflöte 8'
- Prinzipal 4'
- Posaune 16'
- HW/Ped
- OW/Ped

Hauptwerk

- Bordun 16'
- Prinzipal 8'
- Bordun 8'
- Octav 4'
- Flöte 2'
- Nasat 2 2/3'
- Sesquialtera
- Mixtur
- Trommet 8'
- OW/HW

Oberwerk

- Gedackt 8'
- Prestant 4'
- Rohrflöte 4'
- Octav 2'
- Quint 1 1/3'
- Cymbel
- Dulcian 8'

Technical parameters:

- Supply: adapter 12 V.
- Extra galvanic isolation.
- Input USB MIDI IN: 5-pin DIN connector available via MIDI/USB converter.
- Stereo audio output: 6,3 mm JACK.
- Manuals range: 61 tones (5 octaves).
- Pedal range: 32 tones.
- Length of sample sustain: 5-7 s.
- Total number of virtual pipe samples: 1104.
- Sampled attack of a pipe.
- Adjustable additional prolongation of reverberation.
- Polyphony: 600 parallel samples.
- Latency: <15 ms.
- Dimensions: 340x240x260 mm.
- Weight: 5.2 kg.

Module functions:

- Loudness level indication in the real time, limitation display.
- Safe limitation – the exceeding limitation results gradually in the decreasing sound quality, but no sudden disturbing effects (cracking...) occur.
- Setting of the total loudness, setting of individual registers' loudness.
- Setting of true tone height (pitch shift) continually (\pm one semitone).
- Three types of tuning: equal, $\frac{1}{4}$ coma middle tone, Young well tempered tuning.
- Several types of reverb: there is possibility to use samples without naturally sampled release, with sampled release and to enhance reverberation with artificial algorithm in several levels.
- Setting of an arbitrary intonation deviation of virtual pipes from their nominal values. Using smaller intonation deviations, a more realistic sound can be obtained. During the switching on of the module, the distribution of deviations in each specimen changes randomly within the given tolerance limits.
- Function "dynamic pressure". Particularly in the case of smaller organs, fine changes in pressure during the play dependent on the actual air consumption are typical and result in the deviations of intonation. The module contains the algorithm with optional parameters simulating these pressure changes.
- Automatic matching of MIDI channels via "MIDI listen" function.
- "MIDI learn" functions for all stops and couples. It is possible to use individual stops or their combinations using external MIDI device. Moreover there is a possibility to use any key from a playing manual (e.g. upper octave of a keyboard) to toggle stops or their combinations.
- Restoration of manufacture setting – all optional parameters can be rewritten by the original values of manufacturer, if necessary.

Switching on

The equipment is powered from 12 V/2 A adapter. After the adapter has been connected, the two LEDs close to the display lights up. Within several seconds the sound samples are recorded and the inscription "**Reading samples, please wait...**" appears at the display. The module is ready as long as the small dot in the bottom corner appears on the display.

Connection of audio output, MIDI equipment and setting MIDI channels

The module is intended especially for two manual digital organ with a pedalboard or MIDI consoles. Thus, it is possible to match each register group with its own independent channel. It is also possible to use all registers with the single keyboard only – in this case, all register groups are matched with the same MIDI channel number. As the module enables the automatic selection of MIDI channels, it is not necessary to know the corresponding channel number.

1. Connect earphones or amplifier to JACK 6.3 stereo audio output. The module has a galvanic isolated power; thus, when the amplifier is used, the effect of earth loop remains suppressed.
2. Connect "MIDI IN" connector of USB/MIDI cable to MIDI OUT connector of the digital organ, keyboard or another MIDI equipment.
3. Connect opposite end of the USB/MIDI to USB connector in the back side of the CECILIA organ module. Instead of USB/MIDI converter is possible to use USB cable directly – for keyboards with USB output.
WARNING: due to many various implementations of USB-MIDI standard direct USB connection can be in rare cases problematic and we cannot guarantee compatibility with every USB keyboard.
4. In the menu, choose "**Set MIDI**" and press "**OK**". According to your choice of register group with which the MIDI channel should be matched, choose via vertical arrays one of items "**Set PED channel?**", "**Set HW channel?**", "**Set OW channel?**". After the OK button has been pressed, the inscription "**Press a ... tone**" appears – it means that the system is waiting for the MIDI message.
5. Press any tone on the corresponding manual (pedalboard) – the corresponding MIDI channel is stored into equipment memory. As long as the inscription "**Press a ... tone**" lights, it means that no MIDI message has been received. Check the connection of MIDI cable up and verify the right setting of your keyboard for MIDI transmission.
6. For remaining two register groups, repeat steps 4 and 5.

Use of the module

After the MIDI channels have been set, the module is ready to play. For registration, mechanical drawknobs situated in the front of the module are used. The register is switched on by the forward shift of the drawknob. Except of this, all stops and couples (and their combinations) are possible to control via any MIDI message.

After the "**OK**" button has been pressed, the items of menu (functions) are accessible. By means of horizontal cursor arrows, the chosen item is set; its value is set by means of vertical arrows. A rapid change of the value can be carried out by holding the vertical arrow. Particular sub-menu (when present) is accessible by "**OK**" button. For return to the basic level, "**esc**" button is used. The setting of all functions, takes place in the real time and can be changed during the play.

Actual values of setting are immediately stored in the equipment memory and, thus, they are valid after the repeated switching on. The restoration of all parameters to the original values given by manufacturer is quite simple. The first item in the menu is the level indicator. With the help of this indicator in the lower line, the total sound level is indicated dynamically. In the case of too high setting of total loudness and many switched on registers, the limitation can be reached. This state is indicated by “!!!!!!!!!!!!” sign on the display. The limitation manifests itself by a deterioration of the sound quality and should not be reached too often; thus, the setting of loudness level should meet this condition. On the other hand, an occasional occurrence of limitation is hardly to notice.

Description of menu items

1. **“Level“**: level indicator for correct sound level setting.
2. **“Pitch (cents)“**: setting of the height of total tuning in cent units (-99 – +99).
3. **“Master vol. (%)“**: total loudness level (0 – 100).
4. **“Temperament“**: tuning type (equal, ¼ coma middle tone, Young well tempered tuning).
5. **“Randomize tuning“**: setting of tuning tolerance of pipes in cents. Within the framework of this tolerance, virtual pipes are put out of tune randomly (0 – 100).
6. **“Reverb level“**: (0-8) – when set “0”, sampled release is disabled. It is convenient for spaces with good natural acoustic. Degree “1” enables natural sampled release for every pipe. The next levels are adding extra reverberation using mathematical model.
7. **“Dynamic pressure“**
 1. **„Dynam. pr. size“**: setting of the time constant of dynamic pressure effect (0 – 100). The effect is switched off as long as this item is set on zero. Too high values can deteriorate the reality of this effect.
 2. **„Dynam. pr. depth“**: setting of the frequency response of dynamic pressure effect (0 – 100). The effect is switched off as long as this item is set on zero. Too high values can deteriorate the reality of this effect.
8. **“Stops volume“**
 1. **“Vol.HW:Burdon8“**: setting of loudness level of individual stops (0 – 100): 20 stops altogether.
 2. ...
9. **“Set MIDI“**
 1. **“Set PED channel?“**: setting of MIDI channels for pedal.
 2. **“Set HW channel?“**: setting of MIDI channels for 1. manual.
 3. **“Set OW channel?“**: setting of MIDI channels for 2. manual.
 4. **“MIDI:HW-Burdon8?“**: setting of control MIDI message for control particular stop/couple.
 5. ...
 27. **“Reset con. MIDI?“**: reset control MIDI setting for individual stops/couples.
10. **„Restore setting“**: restore of original setting – the values of all items will be replaced by manufacturer setting.

Setting of control MIDI for individual stops/couples

It is possible to control every stop/couple by any MIDI message. Every stop has its menu item for this purpose (see menu structure above). By vertical arrays is possible to choose activities **“listen stop ON”**, **“listen stop OFF”** or **“disable MIDI”** (to reset control MIDI of particular stop). After pressing **“OK”** the device is listening some MIDI message. When the first MIDI message comes, it is paired to particular activity. Two different MIDI messages can be used for stop ON or stop OFF. When the both activities get the same MIDI message, the message is automatically used for toggling the stop ON/OFF.

One MIDI message can control more stops/couples simultaneously. It is convenient for simple stop combinations. After assigning more stops to one MIDI message toggling them, switching all stops off by **“PANIC”** button is necessary. It prevents the state, when the same button (key) is toggling some stops on and the other stops off in one moment.

Example 1 – using digital organ:

Majority of commercial digital organ and consoles transmit MIDI messages when stop buttons are used. In this case stop tabs (buttons) can be used for control stops of Cecilia module. Just choose some stop/couple from menu, choose activity (stop ON) and activate some stop button at digital organ. Particular MIDI message will be paired. Of course, it is necessary also to set an event for stop off. Just use stop OFF function and deactivate the stop tab/button at digital organ.

Example 2 – using simple keyboard:

In the case of using Cecilia module with simple keyboard only there is possible to set any tone for toggling stops. Typically several tones in upper octave are rarely used for playing and can be used for effective switching stops and their combinations. It is convenient for quick changing of registers. Just use **“listen stop ON”** and **“listen stop OFF”** functions of particular stops and press some tone on the keyboard.

Switching off

The module is switched off using “**OFF**” button. Press the button for several seconds, the inscription “**Unplug device**“ appears. Then, unplug the module from the power supply. In principle, do not disconnect the equipment from the power supply without previous safe switching off by the button (the equipment shall not be unplugged from the power supply without previous safe switching off by the button).

WARNING:

The module shall not be switched on without supervision; before you leave, unplug it from the power supply.