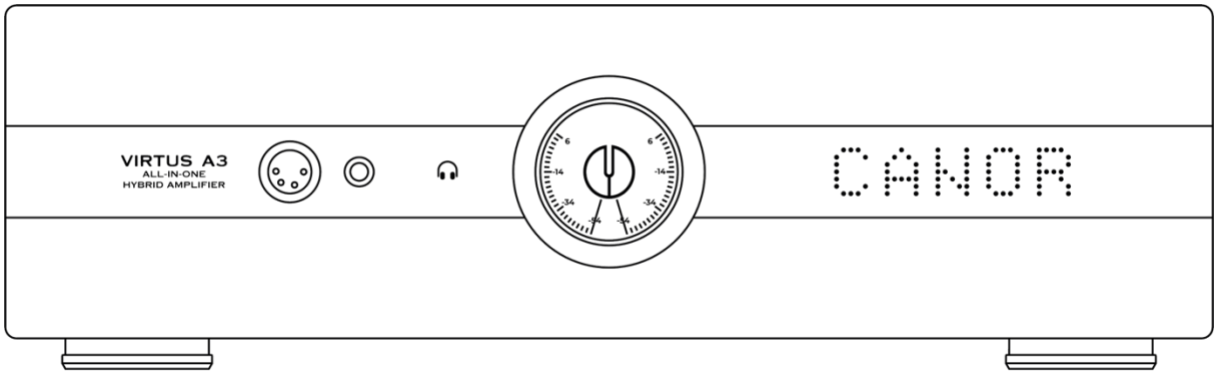
USER MANUAL



CANOR

CANOR VIRTUS A3

All-In-One Hybrid Amplifier

Dear Music Lover,
Thank you for purchasing our Canor Virtus A3 All-In-One Hybrid Amplifier. To preserve and maintain the best characteristics of your amplifier, we recommend that you read the following instructions carefully.

Virtus A3 is an All-In-One Dual Mono Hybrid Class A/AB Amplifier with a full suite of digital and analog inputs, integrating a power amplifier, phono preamplifier, headphone amplifier, and DAC.

SAFETY INSTRUCTIONS
Please read before putting the device into operation.

1. Read the instructions – all safety information and instructions should be read before using the amplifier.
2. Keep the user manual – the safety and user instructions manual should be stored for possible later use.
3. Follow the instructions – all safety and user instructions should be followed.
4. Water and moisture – the Virtus A3 amplifier should not be placed near water, for example near bathtubs, swimming pools, kitchen sinks, etc.
5. Accessories – do not use accessories not recommended by the manufacturer.
6. Placement – do not place the device on an unstable surface. The device may fall, which can cause serious injuries to children or adults, as well as damage to the device. Use only stands or racks recommended by the manufacturer or those sold by dealers with this device. Any placement of the device should be in accordance with the manufacturer's instructions, and only accessories recommended by the manufacturer should be used.
7. Ventilation – the unit should be placed in a way that ensures proper airflow. The device must not be placed on a sofa or other upholstered furniture. The amplifier must not be covered when in operation, as this would prevent proper airflow around the vent holes of the amplifier.
8. Heat – the amplifier must be placed to avoid the heating effect from heat sources, for example, radiators or stoves, or other heat-producing equipment. The distance between the back of the unit and the wall must not be less than 20 cm, and there must be no obstruction within 20 cm above the Virtus A3. A minimum clearance area of 20 cm from other objects must also be maintained on both sides of the unit.
9. Power source – the device must be connected only to a mains supply of the type for which it is designed.
10. Power cord – pay particular attention to the power cord; it must be positioned so that it cannot be stepped on and is protected against mechanical damage.
11. If you do not use the amplifier for a longer period – you should disconnect the power cord from the mains supply or at least turn off the main power switch located on the back panel.
12. Objects containing liquid – do not place objects containing liquids (such as vases, flowerpots) on or near the amplifier, where they could fall over or spill liquid onto it.
13. Damage requiring service – equipment should be repaired only by qualified service personnel if:
    a. The power cord is damaged.
    b. The device was dropped into water, or liquid was spilled on it.
    c. The device was exposed to rain.
    d. The device works incorrectly.
    e. The device fell on the ground or is otherwise mechanically damaged.
14. Repairs – all repairs must be entrusted to a qualified service.
15. General warning – use the device only in accordance with this user guide.

The manufacturer declines any liability should these safety measures not be observed. To help you avoid an electric shock, do not expose the amplifier to rain or moisture!

DELIVERY CONTENT

- Shipping packaging
- Canor Virtus A3 All-In-One Hybrid Amplifier
- Remote control (2 x AAA battery required)
- Power cord
- Textile gloves
- Canor Virtus A3 User Manual

FRONT PANEL

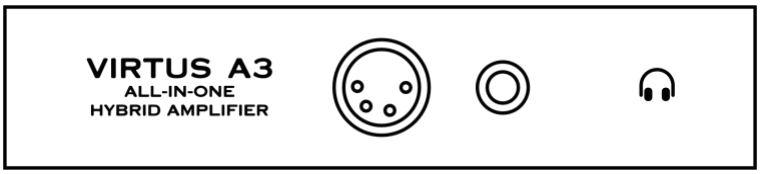
- **VOLUME CONTROL KNOB / SELECTOR OPERATING KNOB with touch panel display**
- **HEADPHONE SELECTOR –** Turns the headphone amplifier on and off
- **HEADPHONE XLR BALANCED OUTPUT –** 4-pin XLR connector
- **HEADPHONE JACK OUTPUT –** 6.3mm jack connector

HEADPHONE AMPLIFIER / HEADPHONE OUTPUTS

The Virtus A3's front panel features a balanced headphone output with a 4-pin XLR connector, as well as an unbalanced connection via a 6.3mm audio jack.

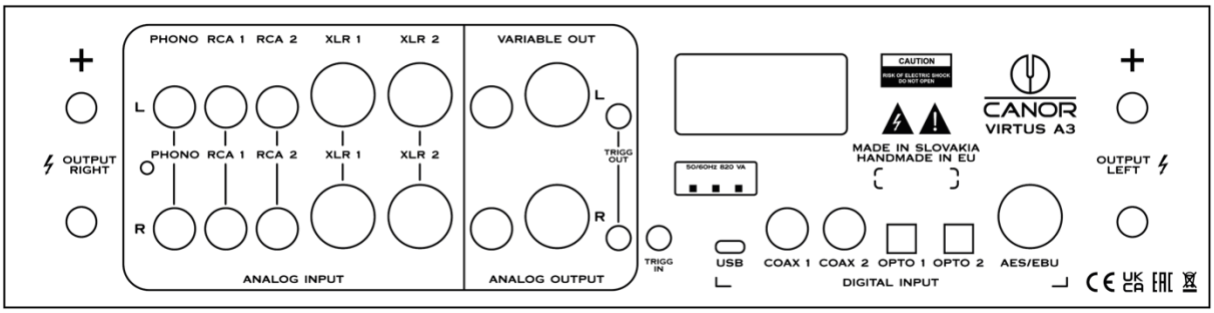
To activate the headphone amplifier, simply touch the headphone icon on the front panel. This will disconnect the output signal to the speaker terminals. To deactivate the headphone output, touch the headphone icon again.

When the headphone output is active and the volume is set below -35dB, deactivating the headphone output will automatically lower the volume by 20dB when reconnecting the signal to the amplifier output terminals. This adjustment is made to protect the connected speakers.



BACK PANEL

- **LEFT / RIGHT SPEAKER OUTPUTS –** Dedicated to both 4- and 8-Ohm loudspeakers
- **PHONO Grounding Screw –** Grounding point for phono analog input
- **PHONO Analog Input –** Left / Right RCA phono input for MM/MC cartridge
- **RCA1, RCA2 Analog Inputs –** Left / Right RCA inputs
- **XLR1, XLR2 Analog Inputs –** Left / Right XLR inputs
- **VARIABLE OUT / Analog Output RCA –** Left / Right RCA variable analog output
- **VARIABLE OUT / Analog Output XLR –** Left / Right XLR variable analog output
- **TRIGGER OUT –** 2 x 3.5mm jack trigger output (12V)
- **TRIGGER IN –** 3.5mm jack trigger input (12V)
- **USB Digital Input –** USB Type-C digital input
- **COAX 1, COAX 2 Digital Input –** Coaxial digital inputs
- **OPTO 1, OPTO 2 Digital Input –** Optical digital inputs
- **AES/EBU Digital Input –** 3-pin XLR digital input
- **POWER –** Mains power inlet / mains switch with mains fuse



IMPORTANT NOTICE

The E88CC tube is not only a component of the signal path, but it also plays a crucial role in the symmetrical feedback. It is therefore strongly advised not to replace the tubes with alternatives that Canor does not specify; in fact, tube rolling is not recommended for the Virtus A3. All the tubes used in our products undergo a precise burn-in, testing, and selection process using specialised testing devices developed by Canor.

BASIC OPERATION

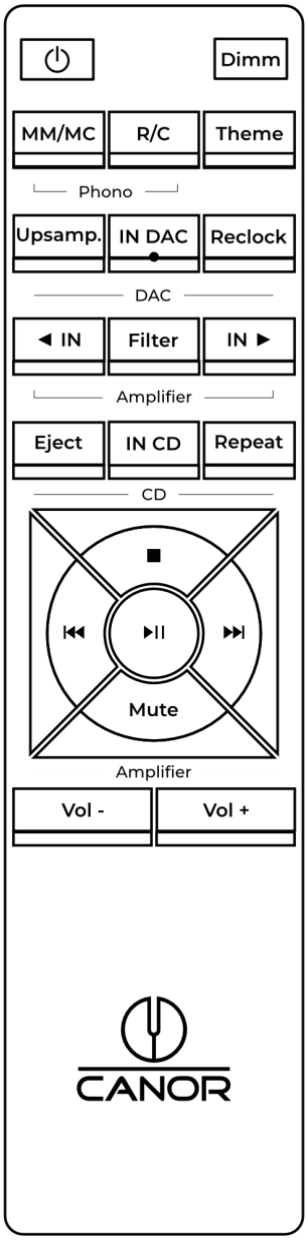
Ensure that all inputs and outputs are connected while the Virtus A3 is turned off or disconnected from the mains.

1. Connect the power cord to the Virtus A3.
2. Turn on the Virtus A3 using the main power switch located on the back panel. After you switch it on, the device will enter standby mode, indicated by the red LED lighting up on the front panel.
3. In standby mode, you can power it up by either touching the display on the central knob on the front panel or by using the power button on the remote control. This will initiate the controlled startup sequence, which includes preheating the tubes to extend their lifespan.
4. A cooling cycle will also occur when the unit is turned off.
5. During the first power-up or when the main power supply is disconnected, the XLR1 input will be pre-selected, and the volume level will be set to –44 dB.

REMOTE CONTROL

Do not expose the sensors of your remote control to direct sunlight or to other strong light sources. The remote control operates within an angle of 60 ° at a distance of up to approximately 5 meters. Aim your remote control at the sensor on the device. There must be no obstacles between the sensor and the remote control. If the appliance is placed behind glass, the operating distance of the remote control may be reduced (depending on the color and thickness of the glass).

The remote control is compatible with your amplifier, DAC, and Phono preamplifier built into the Virtus A3.



General features

- ⏻ – Turning the device on and off.
- **Dimm** – Sets the display brightness in steps.
- **Theme** – Switches display theme on supported devices.

Phono preamplifier features

- **MM/MC** – Instant switching between MM / MC cartridges.
- **R/C** – Instant switching between Load (MC cartridge) and Capacitance (MM cartridge).

DAC features

- **IN DAC** – DAC input selector (switching in loop).
- **Filter** – Digital filter selector (switching in loop).
- *** Reclock** – Enable/disable the re-clocking function.
- *** Upsamp.** – Enable/disable the up-sampling function.

Amplifier / Preamplifier features

- **◄ IN** – Amplifier input selector (left).
- **IN ►** – Amplifier input selector (right).
- **Mute** – Instant muting of the volume.
- **Vol -** – Volume down control button.
- **Vol +** – Volume up control button.

*** CD Player features**

- **Eject** – A short press ejects the CD from the CD player.
- **IN CD** – CD player input selector (switching in loop).
- **Repeat** – Allows you to cyclically opt for a single-track repeat, entire disc repeat, or disable repeat.
- ■ – Ceases CD playback.
- ⏮ – One short press jumps to the beginning of a track. If playback time lasts longer than 5 seconds, further pressing results in jumping one track back. When pressed for a longer time, playback moves smoothly backwards.
- ⏭ – A short press skips one track forward; when pressed for a longer time, playback moves smoothly forward.
- ⏯– Resumes and pauses CD playback.

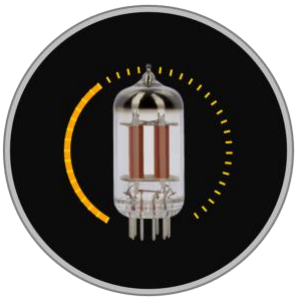
* Not supported for Virtus A3.

OPERATION OF THE VIRTUS A3

The Virtus A3 features two displays:

1. The informative LED dot matrix display, located on the right side of the front panel, shows the selected input and the volume level.
2. The central circular touch display, integrated into the control knob, allows you to turn the device on and off, select the desired input, and adjust other device functions.

To start up from standby mode, simply touch the circular display or press the power button on the remote control. This action initiates a controlled sequence for tube preheating, which is graphically represented on the display by a tube icon and a circular countdown timer. Once the preheating is complete, the device automatically switches to the default or last selected input. Meanwhile, the LED dot matrix display will show the CANOR logo, followed by the currently active input and volume level.



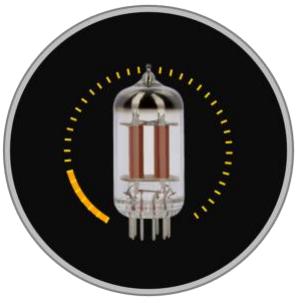


To switch off the device (put it into standby mode), swipe your finger down from the top of the control circular display to reveal the Power-Off icon.

To initiate the shutdown process, press and hold the Power-Off icon for 2 seconds. This will start a controlled tube cooling sequence, which will be visually represented by the tube and a circular countdown timer indicating the time remaining until shutdown. During this process, "CANOR" will appear on the informative display.

Once the cooling sequence is complete, the device will enter standby mode, and the displays and backlight will turn off.





VOLUME CONTROL

The volume can be adjusted in 99 steps, each changing the level by 1 dB. The highest volume setting is 0 dB, while the lowest is -99 dB. An additional step down switches the device to MUTE mode. The volume control is managed by the gain control of a discrete, fully symmetrical operational amplifier. You can adjust the volume using the central control knob on the front panel or with the remote control.

INPUT SELECTION

There are three ways to choose your desired input:

1. Use the ◄ IN / IN ► buttons on the remote control.
2. Slide the control touch screen to the right or left.
3. Hold your finger on the selected input for 2 seconds to unlock the input roller blind. You can then move this roller blind by rotating the central knob and selecting the desired input with a brief touch.





Virtus A3 features the following inputs:
Analog inputs: PHONO, RCA 1, RCA 2, XLR 1, and XLR 2
Digital inputs: USB, COAX 1, COAX 2, OPTO 1, OPTO 2, and AES/EBU

The analog phono input (labelled PHONO) is compatible with turntables that use both MM (Moving Magnet) and MC (Moving Coil) cartridges.

To select the cartridge type and adjust the gain, touch the MM or MC icon above the PHONO input, then rotate the central knob. The available gain settings are: MM at 40 dB or 46 dB and MC at 60 dB or 66 dB. You can select your desired setting by briefly touching the icon.

Additionally, to choose capacitance/load parameters, touch the capacitance/load icon below the PHONO input and rotate the central knob. For MM cartridges, you can select from 50pF, 150pF, 300pF, and 400pF. For MC cartridges, the options are 47k, 1k, 100Ω, 50Ω, and 10Ω. Again, briefly touch the parameter you want to select.









DIGITAL INPUTS / DIGITAL FILTER SELECTION
All Virtus A3 digital inputs allow for the selection of digital filters. The available digital filters are: Fast Rolloff, Slow Rolloff, Minimum Phase Fast, Minimum Phase Slow, Linear Apodizing, Hybrid Filter, Brickwall Filter, Optimal Transient, and MQA Filter.
To select a filter, touch the "PCM – Fx" icon located above the displayed digital input. You can then choose one of the filters using the central rotary knob and confirm your selection with a brief touch on the desired filter.





DEVICE SETTINGS / SUB-MENU
To access the sub-menu from the main menu on the circular display, swipe up from the bottom. In this sub-menu, you can adjust the following settings: Dimmer, Saver, HT mode (Home Theatre mode), Precision timing, +3dB/+6dB gain, Skip inputs feature, and view information about the temperature of the heat sinks as well as the speed of the cooler fans.

Navigate through the sub-menu by swiping right to view the next page and left to return to the previous page. To exit the sub-menu and return to the main menu, swipe down from the top of the circular display. This swipe action applies to all pages within the sub-menu.

DIMMER FUNCTION
This feature allows you to adjust the backlight level of the central knob and the Virtus A3 displays. You can control the brightness using the rotary central knob or the DIMM button on the remote control, and any selected backlight level does not require confirmation.
Please note that in the Dimmer menu, you cannot adjust the volume using the rotary knob. Instead, the knob is used to adjust the dimmer/backlight level.

When you select the lowest backlight level, known as "Dimmer OFF," the device's backlight will completely turn off after 3 seconds. However, if you touch the control device or change the volume or input, the display will briefly light up for 3 seconds to provide information. Unless you change the backlight setting, the "Dimmer OFF" function will remain active.





SAVER

This feature allows you to choose between two options for displaying the screensaver on the Virtus A3 control circular display: Logo or VU Meter. The selected option will appear after 1 minute of inactivity in the main menu. The screensaver will disappear when you touch the display or change inputs using the remote control, and it will reappear after another minute of inactivity. Volume control, whether adjusted via the remote control or the rotary knob, does not impact the screensaver function.







HT MODE (HOME THEATRE MODE)

The feature allows you to set a fixed volume for one of the available inputs: RCA1, RCA2, XLR1, XLR2, COAX1, or OPTO1. Once you select an input, the current volume for that input is saved, and the display is updated to rename the input to "HT." While in HT mode, the volume cannot be adjusted for that input unless you either select HT mode for a different input or deactivate HT mode altogether. This feature is ideal for devices that have volume control, enabling the user to make direct volume adjustments or align the volume with the specific device.

Please note that in the HT mode menu, you cannot adjust the volume using the rotary knob. Instead, the knob is used to scroll through the HT mode options.



PRECISION TIMING

Precision Timing alters the way the digital signal is processed by the device. By default, this feature is enabled to ensure the highest audio fidelity, as the Virtus A3 requires a source signal with highly precise timing. However, if the connected source device transmits incorrect data or unstable timing, it may result in audible distortion or intermittent signal dropouts. If you experience any of these playback issues with your specific source equipment, please disable the Precision Timing feature to increase the system's tolerance and stabilize the connection.

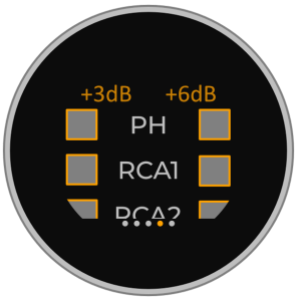




+3dB / +6dB

This setting allows you to adjust the gain for the analog inputs: PH (phono), RCA1, RCA2, XLR1, and XLR2. By tapping the corresponding field, you can set the gain for each analog input based to either +3dB or +6 dB. This function is useful for aligning connected devices that have different input gain levels. Turn the central rotary knob to navigate through the menu.

Please note that in the +3dB / +6dB menu, you cannot adjust the volume using the rotary knob. Instead, the knob is used to scroll through the +3dB / +6dB options.



SKIP INPUTS

You can disable one or more inputs on the device, including PHONO, RCA 1, RCA 2, XLR 1, XLR 2, USB, COAX 1, COAX 2, OPTO 1, OPTO 2, and AES/EBU. To disable an input, simply touch the corresponding box. The disabled inputs will not appear in the main input selection menu or on the display when switching between inputs.

Please note that in the Skip INPUTS menu, you cannot adjust the volume using the rotary knob. Instead, the knob is used to scroll through the input selection options.



The display shows real-time temperature data on the power components and fan speeds of both channels on the Virtus A3 output stages. Please note that the temperature difference between channels can vary by up to 10 °C. This is a perfectly normal operational state. The data presented here is for informational purposes only.



FACTORY RESET

The factory reset will restore the device to factory settings. For the factory reset, tap the power button, then use the knob to navigate through the following menu. Choose the “Yes” option and confirm by tapping the screen.





The last page in the settings menu is the software version information screen.



VARIABLE OUT / ANALOG OUTPUT

The back panel of the Virtus A3 includes a pair of balanced (XLR) outputs and a pair of unbalanced (RCA) variable output connections. These connections are mainly designed for use with a powered (active) subwoofer or an external power amplifier.

ELECTRICAL PROTECTIONS

The Virtus A3 is equipped with several advanced fault detection and protection features to prevent damage to the device. The protection features include protection against incorrect device connection, overload, and short circuits of the output terminals. These features are designed to protect the Virtus A3 itself as well as other components in your setup.

SMALL AND LARGE WARNING TRIANGLES

A small red triangle with an exclamation mark indicates a temporary error detected on the left or right channel. This merely informs the user of a momentary problem (usually a signal peak overload). Playback is not interrupted, and if the problem doesn't persist, the message disappears after a minute.

A large red triangle with an exclamation mark indicates a persistent error. Playback is interrupted, and the Virtus A3 amplifier output stages are disconnected. When the large red triangle alert appears, it is necessary to turn off the device. To learn more about possible errors and their solutions, see the sections OT PROTECTION, OC PROTECTION, and DC ERROR.







OVERTEMPERATURE PROTECTION—OT PROTECTION

The Virtus A3 power components can reach temperatures of up to 100 °C during normal operation. This is expected and within normal operating conditions.

OT protection reacts if the device starts to overheat due to incorrect product placement or if there is insufficient airflow for the cooling fans. In case of overheating, a large red warning triangle will appear on the display, indicating an OT protection alert on the right (R) or left (L) channel.

To resolve the problem, turn the Virtus A3 off and let it cool down for a few minutes. To prevent this problem, make sure the product is placed in a location with sufficient airflow for the cooling fans, and check that the fan grilles are not covered or obstructed. In case this error persists, please contact the service center or manufacturer.



OVERCURRENT PROTECTION—OC PROTECTION
This feature detects and protects against overcurrent, overload, and short circuits at the speaker terminals.

This protection will react and disconnect the amplifier output stages if the output is overloaded for an extended period, or if speaker terminals are accidentally short-circuited. The output stage overloads can be caused by an inappropriate choice of speakers (usually speakers with too low an impedance). In case of overloading, a large red warning triangle will appear on the display indicating an OC protection alert on the right (R) or left (L) channel.

To resolve the problem, turn the Virtus A3 off and let it cool down for a few minutes. Subsequently, make sure that the speaker terminals are not short-circuited, and that the positive and negative speaker poles are not reversed. In addition, check whether your speakers meet the required impedance. If the error persists, please contact the service center or manufacturer.



DC ERROR
This error is detected if a DC signal voltage is present at the output. This may be caused by an external source device error.

To resolve the error, unplug the source device from the Virtus A3. In case this error persists, please contact the service center or manufacturer.



FAN STOP WARNING

This message indicates the failure of one of the cooling fans. Check the cooling fan grilles for any foreign objects. The fan stops alert overrides all other UI graphics when detected.





INPUT RELAY CLEANING

The Virtus A3 has a function for cleaning the contacts of the electronic relays. This function is intended to extend the lifespan of relay contacts that have not been used for a long time and to improve their electrical conductivity. Cleaning is carried out by triggering multiple high-frequency signals sequentially through all relays in the device. The function is started automatically every 20th time the device is turned off, and its progress is shown by the CLEANER inscription on the informative LED dot matrix display.

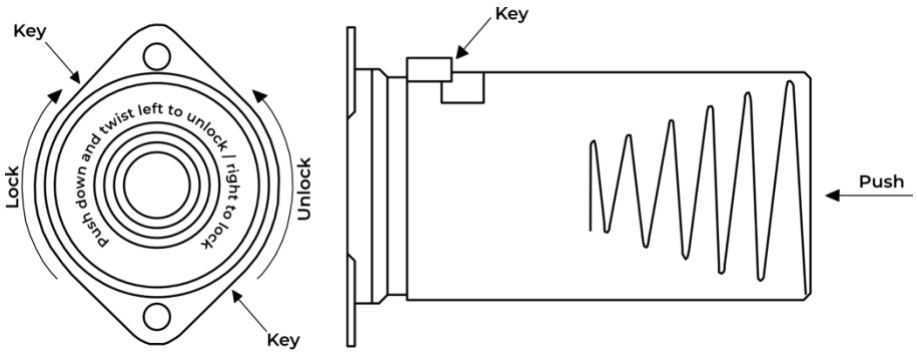
PREAMPLIFIER VACUUM TUBE ANTI-RESONANCE COVER

The Virtus A3 preamplifier tubes are housed in anti-resonance covers that not only provide anti-resonance and shielding properties but also protect the tubes during transportation.

If you need to replace the preamplifier tube, follow these steps to remove the cover:

1. Gently press and turn the cover to the left.
2. Slide the cover out of the locking grooves and lift it off.

After replacing the tube, carefully reposition the cover by aligning it with the locking grooves. Press down gently and turn it to the right to lock it in place.



FIRMWARE UPDATE MANUAL

UPDATE REQUIREMENTS

- Windows x86 64-bit
- Update ZIP package provided by CANOR
- USB-C cable

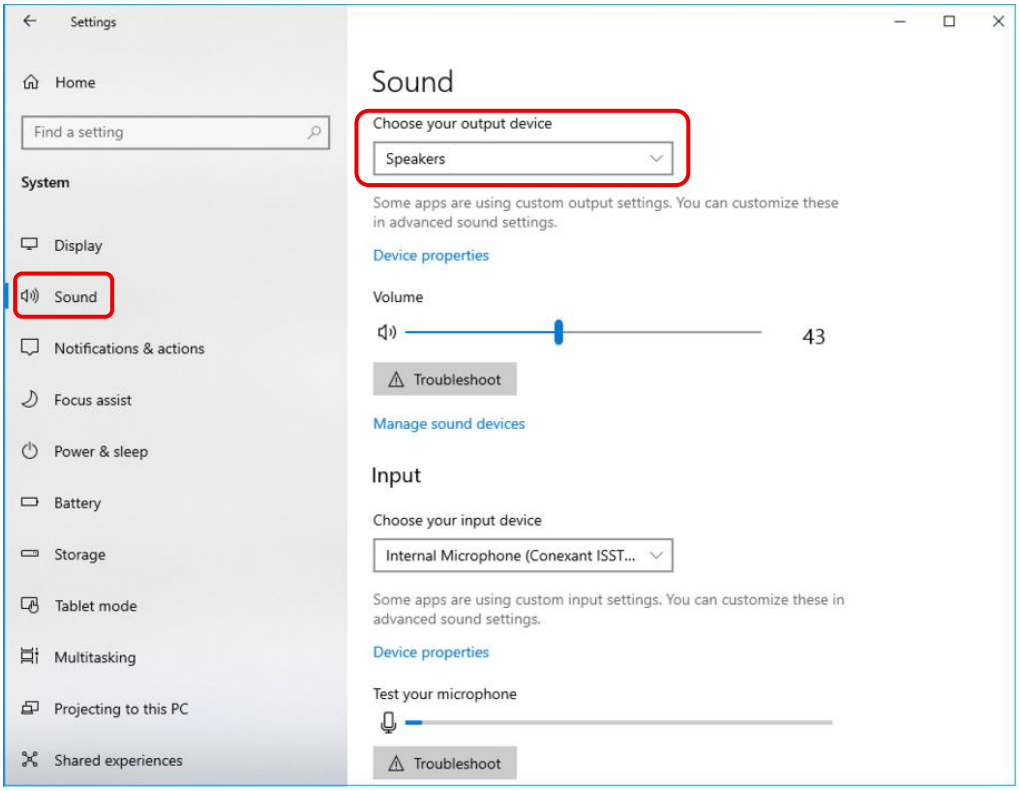
UPDATE PROCEDURE

1. Prepare your Windows PC for a firmware update of your Virtus A3 product. We recommend that during the firmware update, you keep only the Virtus A3 connected to the computer and disconnect all other USB devices and USB hubs.

2. Extract the entire ZIP archive into a folder stored on the local disk of your computer. This is necessary for the successful completion of the update.

3. Connect the Virtus A3 and your PC using a USB data cable. The Virtus A3 has a USB-C connector on its back panel. If the Virtus A3 was not turned on using the main power switch on the back panel, turn it on now. Then switch the entire device to normal operating mode by tapping the display (the Virtus A3 will wake up).

4. Verify that communication between the PC and Virtus A3 is working by making sure that the Virtus A3 appears in the list of your audio devices, which means that it is visible to the PC.



5. To enable the update, swipe up from the bottom of the device's touchscreen to open the menu, then go to the last screen with the Update EN switch and hold the button. Update Enable is active once the switch on the display turns blue.





NOTE: After enabling the Update Enable feature, the device can continue to be used as normal. However, the Update Enable switch cannot be reset, which does not affect the device functionality. The feature will reset after the device is restarted.

6. After enabling the Update EN function, point the remote control at the Virtus A3 and press the ">>| Forward" key. This action will definitively switch the device into update mode. The Virtus A3 will disconnect from the PC as an audio device and connect as a "data device". The user can still interact with the device, but this is no longer recommended.

   ALERT: Do not turn off or disconnect the device from the power supply during the update.

7. Run the firmware update installation file named "VirtusA3_Update_Utility" with the .cmd extension from the update folder.

8. Follow the on-screen instructions in the installation file.

9. During the device update process, the Virtus A3's display will turn off, and update progress details will appear on the computer screen.

   ALERT: Do not turn off or disconnect the device from the power supply during the update.

10. Once the update is complete, power down the Virtus A3 by turning off the main switch on the back panel, then wait for 10 seconds.

11. Turn the device on using the main power switch located on the back panel.

12. After the update, the Virtus A3 must be turned on and off again using the device's display interface. The new firmware is applied only after a restart, since the system verifies the update during the first startup following installation.

13. In the Virtus A3 user interface, check the current firmware version. To do so, swipe up from the bottom of the display and go to the last screen that displays the current firmware version.

14. The device update is now complete.

CAUTION!

Directive 2012 / 19 / EU of the European Union on waste electrical and electronic equipment (WEEE) governs the issue of separate waste collection.

This device must not be disposed of in unsorted municipal waste. Take the appliance to a collection centre for recycling and disposal of electrical and electronic equipment waste. Correct disposa prevents negative impacts on the environment and human health. You will thus contribute to the protection of the environment.

EUROPEAN COMMUNITY DIRECTIVES

This product is designed and manufactured to comply with existing laws of the European Community. This product is certified by a testing laboratory and bears the CE mark.

GUARANTEE CONDITIONS

Your CANOR Virtus A3 hybrid amplifier is guaranteed against any defect in materials and workmanship for 24 months from the date of purchase, except for audio vacuum tubes, which are covered by warranty for three months.

The warranty only applies if an original proof of purchase and acknowledged certificate of warranty can be furnished. The warranty covers defects in materials and labour but does not cover misuse, unauthorized modifications, and external causes such as acts of nature.

SPECIFICATIONS

Stereo output power	2 x 150 W / 4 Ω, 2 x 100 W / 8 Ω (IHF Dynamic Power)
Headphone unbalanced output	500 mW / 30 Ω, 70 mW / 300 Ω
Headphone balanced output	650 mW / 30 Ω, 270 mW / 300 Ω
Gain	34.5 dB
Input sensitivity	550 mV
Gain phono	MM 40 dB, MM 46 dB, MC 60 dB, MC 66 dB
Damping factor	180 / 4 Ω, 380 / 8 Ω
Frequency range	10 – 35 000 Hz (± 0.5 dB / 5 W)
Input impedance	50 kΩ
Analog Inputs	1 pair RCA (Phono) / 2 pairs RCA / 2 pairs XLR
Analog Variable Outputs	1 pair RCA / 1 pair XLR
Digital Inputs	1 x USB (PCM up to 32-bit / 768 kHz & Native DSD up to DSD512 & DoP up to 256) 2 x Coax (PCM up to 24-bit & 192 kHz) 2 x Opto (PCM up to 24-bit & 192 kHz) 1 x AES/EBU (PCM up to 24-bit & 192 kHz)
DAC Configuration	2 x ESS 9038Q2M (Dual Mono)
Headphone Outputs	1 x 6.3mm jack / 1 x 4-pin XLR
Total Harmonic Distortion	< 0.005 % / 1 kHz, 5 W < 0.008 % / 1 kHz, 1 W
Signal-to-noise ratio	> 90 dB (20 Hz – 20 kHz)
Tube Complement	2 x E88CC
Trigger Connectors (12 V)	1 x IN (3.5mm jack) / 2 x OUT (3.5mm jack)
Power	230 V, 50 – 60 Hz, 820 VA
Dimensions (W x H x D)	435 x 130 x 460 mm
Weight (Net)	18 kg
Weight (gross)	23 kg

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19/11/2026