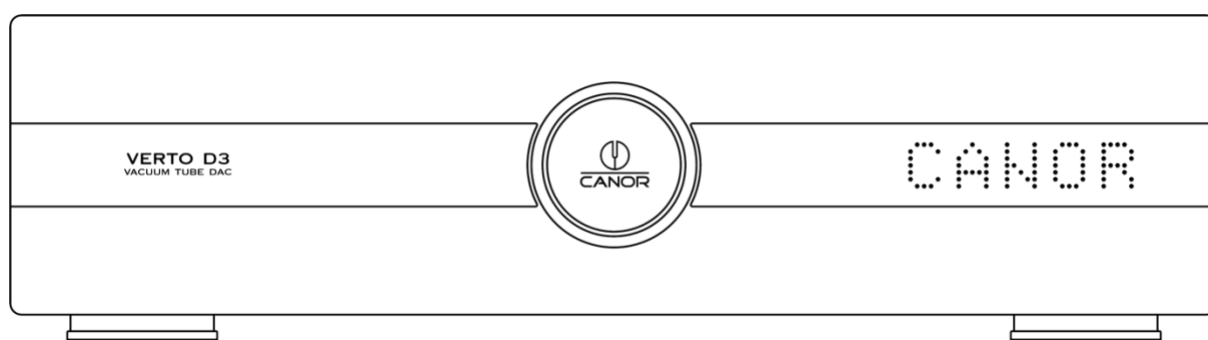


USER MANUAL



CANOR VERTO D3
Tube Digital to Analog Converter

Dear Music Lover,

Thank you for purchasing our CANOR Verto D3 Tube Digital to Analog Converter. To preserve and maintain the best characteristics of your DAC, we recommend you carefully read the following lines.

Verto D3 is a high-end tube-based output, discrete digital-to-analog converter with a full dual-mono architecture. Offering maximum flexibility thanks to a combination of fixed and variable analog outputs.

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 device.
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 Verto D3 DAC 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 a device on an unstable pad. The device may fall, which can cause serious injuries to children or adults, as well as damage to the device. Use only pads or racks recommended by the manufacturer or pads sold to 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 the way to ensure proper airflow. That means it is not allowed to place the device on a sofa, or on upholstered furniture. The DAC may not be covered over when in operation; it would otherwise prevent proper airflow around the vent holes of the device.
8. Heat – DAC must be placed to avoid the heating effect from heat sources, for example, radiators or stoves, or other heat-producing equipment. The distance from the back wall of the unit may not be less than 20 cm, and 20 cm above the area of Verto D3 may not be any barrier. Alongside the unit should be ensured 20 cm minimum distance from other objects.
9. Power source – the device must be connected only to a main supply for what it is designed for.
10. Power cord – it is necessary to pay particular attention to a power cord, it must be positioned to avoid setting foot on it and ensure it is protected against mechanical damage.
11. If you do not use the DAC 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 these objects (vases, flowerpots), so that they can fall on the DAC and, eventually, prevent the liquid from being leaked out on the device.
13. Damages requiring service – equipment should be repaired only by qualified service if:
 - a. The power cord is damaged.
 - b. The device dropped into the water or was poured.
 - 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 device to rain or moisture!

DELIVERY CONTENT

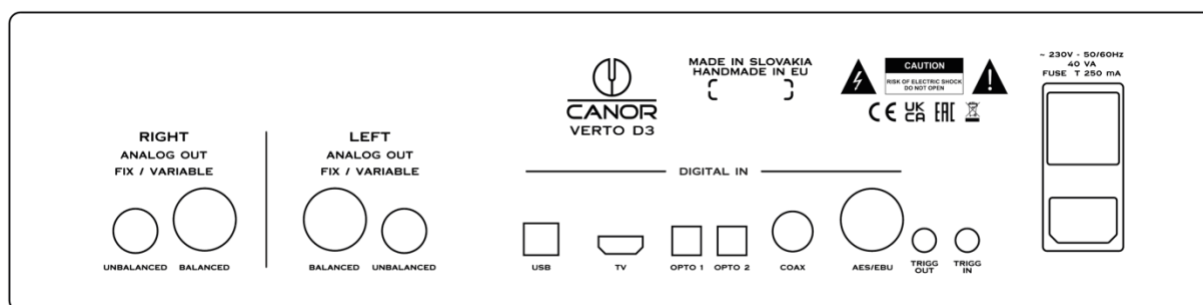
- Shipping packaging
- CANOR VERTO D3 Digital to Analog Converter
- Remote control (2x AAA battery required)
- Power cord
- Textile gloves
- CANOR VERTO D3 User Manual

FRONT PANEL

- **CONTROL KNOB / SELECTOR OPERATING KNOB with touch panel display**
- **LED DOT MATRIX DISPLAY** – informative display

BACK PANEL

- **RCA Analog Output** – Left / Right RCA unbalanced analog output
- **XLR Analog Output** – Left / Right XLR balanced analog output
- **USB Digital Input** – USB type-B digital input
- **TV Digital Input** – HDMI digital input
- **OPTO 1, OPTO 2 Digital Input** – Optical digital inputs
- **COAX Digital Input** – Coaxial digital input
- **AES/EBU Digital Input** – 3pin XLR digital input
- **TRIGGER OUT** – 2 x 3,5mm jack trigger output (12V)
- **TRIGGER IN** – 3,5mm jack trigger input (12V)
- **POWER** – Mains power inlet / mains switch with mains fuse



REMOTE CONTROL

Do not expose the sensors of your remote control to direct sunlight or to other strong light sources. Remote control operates at an angle of 60 ° to about 5 meters. Aim your remote control at the sensor on the device. There may not be any obstacles in the way between the sensor and remote control. If the appliance is placed behind glass, it may result in shortening the operating distance of a remote control (according to the colour and strength of the glass). The buttons on the remote control have the same function as the buttons on the front panel of the device.

The remote control is compatible with your Tube DAC Verto D3.

General features

-  – Turning on and off the device.
- **Dimm** – Sets the display brightness in steps.
- **Theme** – Switch display theme on supported devices (Not supported for Verto D3).

Phono preamplifier features (Not supported for Verto D3)

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

DAC features

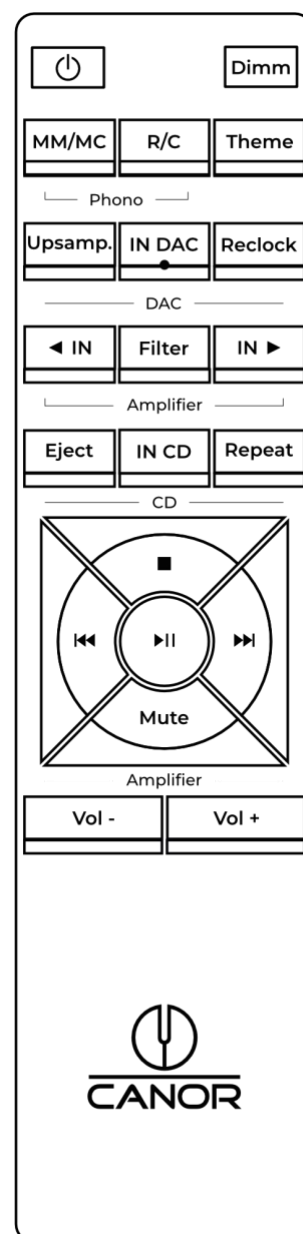
- **Upsamp.** – Enable/disable the up-sampling function.
- **IN DAC** – DAC input selector (switching in loop).
- **Reclock** – Enable/disable the re-clocking function (Not supported for Verto D3).
- **Filter** – Digital filter selector (switching in loop).

Amplifier / Preamplifier features (Only **Mute** and **Volume** is supported)

- **◀ 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 (Not supported for Verto D3)

- **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.



BASIC FUNCTIONS OF REPRODUCTION

****Note: **** Ensure that all inputs and outputs are connected while the Verto D3 is turned off or disconnected from the mains.

1. Connect the power cord to the Verto D3.
2. Turn on the Verto D3 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. Once on standby, 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 default digital input will be USB and the analog output will be set to FIX.

OPERATION OF THE VERTO D3

The Verto D3 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 Variable/Fix output info: selected attenuation level, or FIX output.
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.



INPUT SELECTION

There are three ways to choose your desired input:

1. Use the IN DAC button 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.



Verto D3 features the following digital inputs: USB, TV, OPTO 1, OPTO 2, COAX and AES/EBU.

DIGITAL FILTER SELECTION

All digital inputs allow for the selection of digital filters. The available digital filters are: Minimum Phase, Linear Apodizing, Fast Rolloff, Linear Low ripple, Slow Rolloff, Minimum Phase Fast, Minimum Phase Slow, Hybrid filter and Optimal Transient 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. You can as well use the Filter button on the remote control (switching in loop).



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, Output, Analog Filter, Upsampling, Precision Timing, Skip INPUTS, Factory Reset and firmware version.

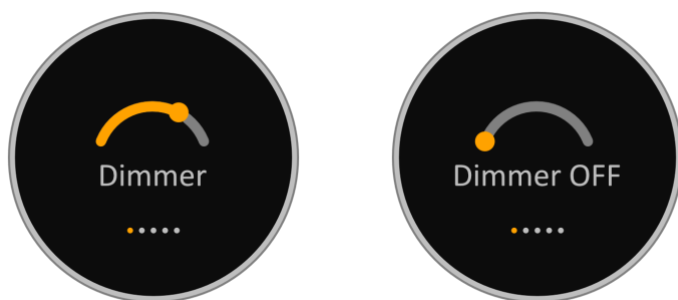
Navigate through the sub-menu by swiping right to view the next page and left to return to the previous page. To exit the sub-menu and return to the main menu, swipe down from the top of the circular display. This swipe action applies to all pages within the sub-menu.

DIMMER FUNCTION

This feature allows you to adjust the backlight level of the 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 Verto D3 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.



OUTPUT

Verto D3 allows you to choose between Fixed or Variable analog output. The Variable option allows you to adjust the volume of, for example, your power amplifier or active speakers. The output connectors used are the same in both cases, unbalanced RCA or balanced XLR. The Fix or Variable output is determined by the selection in the device's submenu.

The selected Fix Output is shown as "Fix" on the informative display next to the information about the selected digital input.

The selected Variable Output is shown on the informative display next to the digital input, as the value of the currently selected volume level in decibels, for example: -44dB.

VARIABLE OUTPUT / 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. You can adjust the volume using the central control knob on the front panel or with the remote control.

VARIABLE OUTPUT / MUTE

When Variable Output is selected, you can use the MUTE function, either on the remote control or by turning the central knob below -99dB.



ANALOG FILTER

An Analog Filter at the output of a Digital-to-Analog Converter acts as a reconstruction filter to smooth out the discrete "stairstep" signal into a continuous analog waveform.

The function allows you to permanently ENABLE the Analog Filter or activate it in AUTO mode.

AUTO mode enables the Analog Filter for all DSD format files.

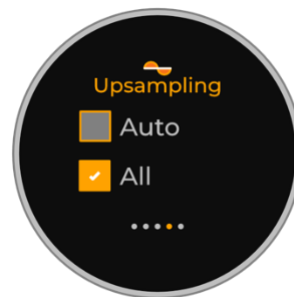


UPSAMPLING

This function increases the sample rate of a digital audio signal before conversion to analog.

As a standard, the function is active only for MQA files. In AUTO mode, upsampling is active for MQA files and files with a frequency of 44.1 and 48kHz. In ALL mode, the upsampling function is active for all digital files.

The active upsampling function is indicated by an icon  on the main menu touch screen.



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 Verto D3 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 turn the Precision Timing feature Off to increase the system's tolerance and stabilize the connection.



SKIP INPUTS

You can disable one or more digital inputs on the device, including USB, TV, OPTO 1, OPTO 2, COAX 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.



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 screen in the settings menu is the software version information screen.



RELAY CLEANING

The Verto D3 has a function for the contacts of used electronic relays. This function is intended to extend the relay contact lifespans that have not been used for a long time and also increase 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 into standby, and its progress is shown by the RELAY CLEANING inscription on the central touch display.

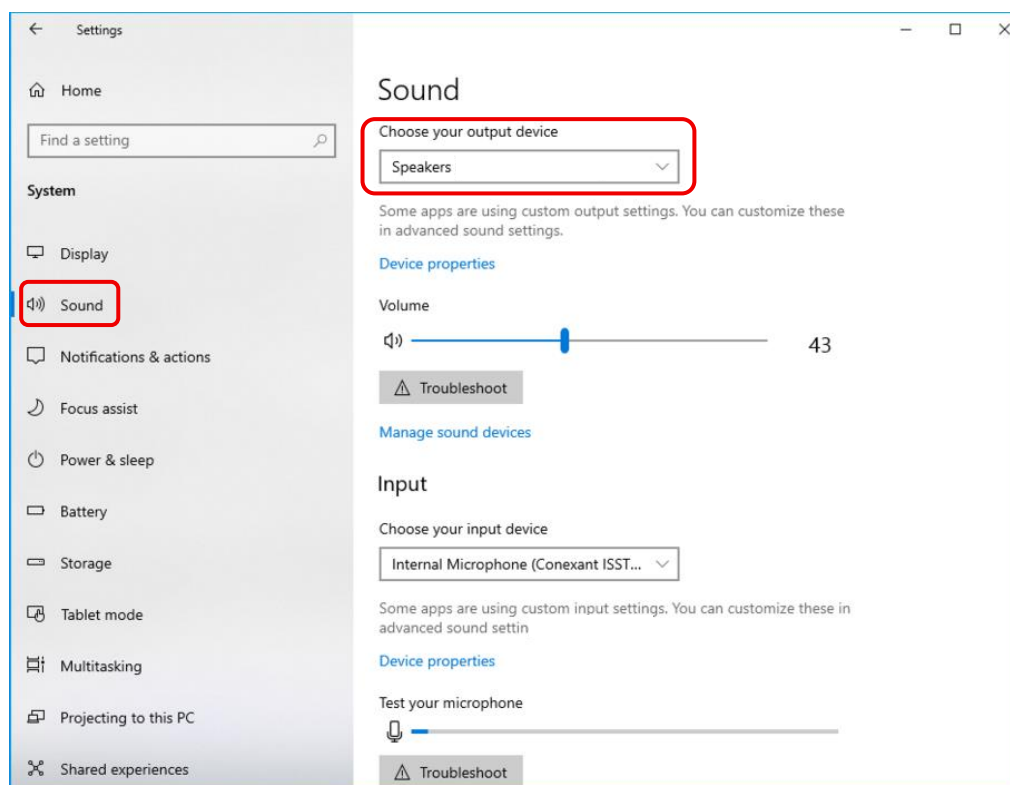
FIRMWARE UPDATE MANUAL

UPDATE REQUIREMENTS

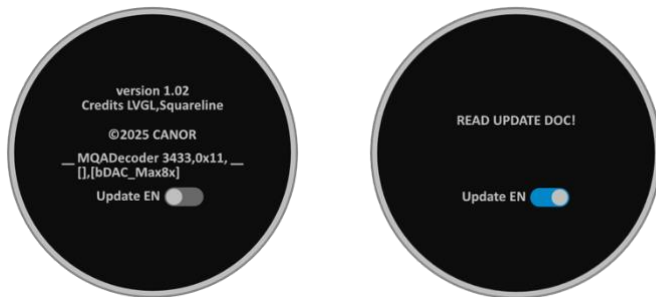
- Windows x86 64-bit
- Update ZIP package provided by CANOR
- USB data cable

UPDATE PROCEDURE

1. Prepare your Windows PC for a firmware update of your Verto D3 product. We recommend that during the firmware update you keep only the Verto D3 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 Verto D3 and your PC using a USB data cable. The Verto D3 has a USB-B connector on its rear panel.
4. If the Verto D3 was not turned on using the main power switch on the back panel, turn it on now. Then turn the entire device to normal operating mode by tapping the display (the Verto D3 will wake up).
5. Verify that communication between the PC and Verto D3 is working by making sure that the Verto D3 appears in the list of your audio devices, which means that it is visible to the PC.



6. Enable the update on the device's touchscreen, swipe up the bottom menu, then go to the last screen with the Update EN switch and hold the button. Update Enable is in active mode as long as the switch on the display turns to 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 has no effect on the device functionality. The feature will reset after the device is restarted.

7. After enabling the Update EN function, point the remote control at the Verto D3 and press the ">>| Forward" key. This action will definitively switch the device into update mode. The Verto D3 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.

8. Run the firmware update installation file named "VertoD3_LoadUpdate" with the .cmd extension from the update folder.
9. Follow the on-screen instructions in the installation file.
10. During the device update process, the Verto D3'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.

11. Once the update is complete, power down the Verto D3 by turning off the main switch on the back panel, then wait for 10 seconds.
12. Turn the device on using the main power switch located on the back panel.
13. After the update, the Verto D3 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 after installation.
14. In the Verto D3 user interface, check the current firmware version. That is, swipe up the bottom menu of the device and load the last screen that displays the current firmware version.
15. The device update is now complete.

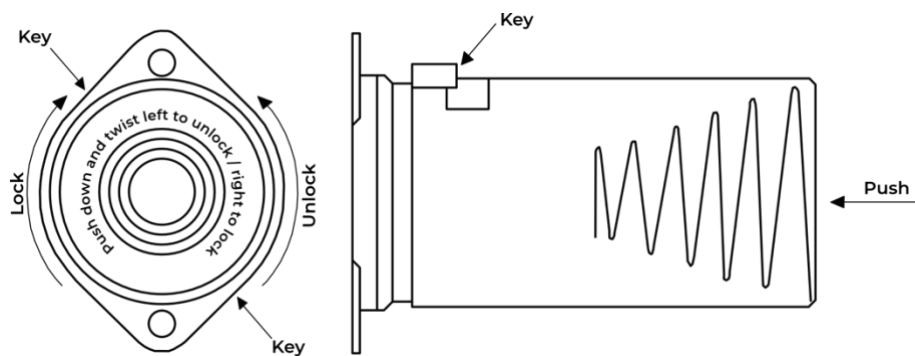
VACUUM TUBE ANTI-RESONANCE COVER

The Verto D3 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 vacuum tubes, 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.



CAUTION!

The Waste Electrical and Electronic Equipment Directive Regulation of the European Union 2002 / 96 / EC governs the issue of separate waste collection.

This device may not be disposed of in unsorted municipal waste. Devolve the appliance into a collection centre for recycling and disposal of electrical and electronic equipment waste. Correct disposal of waste does not cause 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 Verto D3 Digital to Analog Converter is guaranteed against any defect in materials and workmanship for 24 months from the date of purchase except for audio vacuum tubes that 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

DAC Configuration	2 x ES9039Q2M (Dual-mono)
Filter Settings	9 x Digital Filter
Digital Inputs	1 x USB-B (PCM up to 24-bit / 768 kHz & DoP DSD up to DSD256 & Native DSD up to DSD512) 2 x OPTO (PCM up to 24-bit / 192 kHz, DoP DSD 64) 1 x COAX (PCM up to 24-bit / 192 kHz, DoP DSD 64) 1 x AES/EBU (PCM up to 24-bit / 192 kHz, DoP DSD 64) 1 x TV (HDMI) (PCM up to 24-bit / 192 kHz)
Analog Outputs	1 pair RCA (unbalanced) 1 pair XLR (balanced)
Output Impedance	RCA: 100 Ω XLR: 200 Ω
Frequency Range	< +- 0.1 dB at 20 – 20 000 Hz
Total Harmonic Distortion (XLR)	< 0.009 %
Output Voltage	RCA: 2 VRMS XLR: 4 VRMS
Signal-to-noise ratio (XLR)	> 110 dB (A-wt)
Crosstalk (XLR)	> 124 dB
Tube Complement	4 x E88CC
Trigger Connectors (12 V)	1 x IN (3,5mm jack) / 1 x OUT (3,5mm jack)
Power	230 V, 50 – 60 Hz, 40 VA
Dimensions (W x H x D)	435 x 122 x 370 mm
Dimensions (W x H x D with knob & connectors)	435 x 122 x 415 mm
Weight (Net)	12 kg
Weight (gross)	17 kg



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