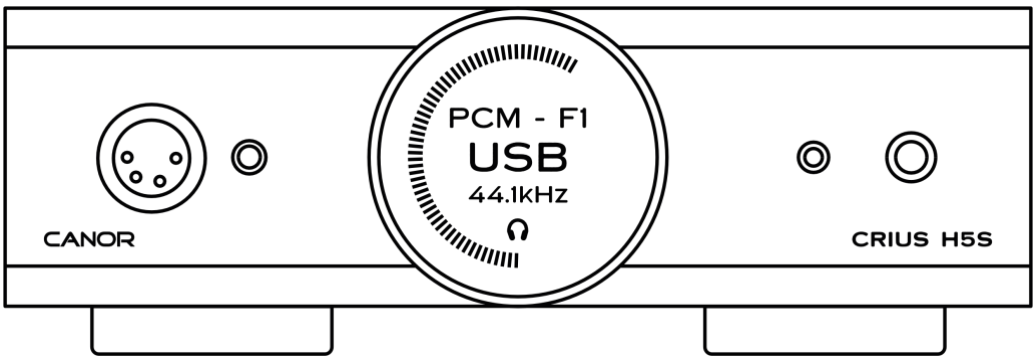
USER MANUAL



CANOR CRIUS H5S

Solid-State Headphone Amplifier

Dear Music Lover,

Thank you for purchasing our CANOR CRIUS H5S Solid-State Headphone Amplifier. To preserve and maintain the best performance of your amplifier, we recommend that you carefully read the following lines.

The Crius H5S is a versatile headphone amplifier featuring a built-in DAC and preamplifier with a dedicated balanced bypass option.

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 headphone 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 Crius H5S 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. Do not place any other device on the top of the Crius H5S while it is operating.
7. Ventilation – the unit should be placed in a way to ensure proper airflow. That means it is not allowed to place the device on a sofa or on upholstered furniture. The headphone amplifier may not be covered over when in operation; it would otherwise prevent proper airflow around the vent holes of the device.
8. Heat – The Crius H5S 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 must be at least 20 cm, and there must be no barrier within 20 cm above the area of the Crius H5S. Alongside the unit a minimum distance of 20 cm 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 the power cord; it must be positioned to avoid stepping on it and ensure it is protected against mechanical damage.
11. If you do not use the device 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 device and, eventually, prevent the liquid from leaking 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 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 CRIUS H5S Solid-State Headphone Amplifier
- Remote control (2 x AAA battery required)
- Power cord
- CANOR CRIUS H5S User Manual

FRONT PANEL

- **VOLUME CONTROL KNOB / SELECTOR OPERATING KNOB WITH A TOUCH SCREEN**
- **HEADPHONE OUTPUTS** – Balanced: 4-pin XLR connector and 4.4 mm jack connector
  – Unbalanced: 3.5 mm jack connector and 6.3 mm jack connector

HEADPHONE AMPLIFIER / PREAMPLIFIER

The Crius H5S headphone output is activated by default and is indicated by a headphone icon at the bottom of the touchscreen display.



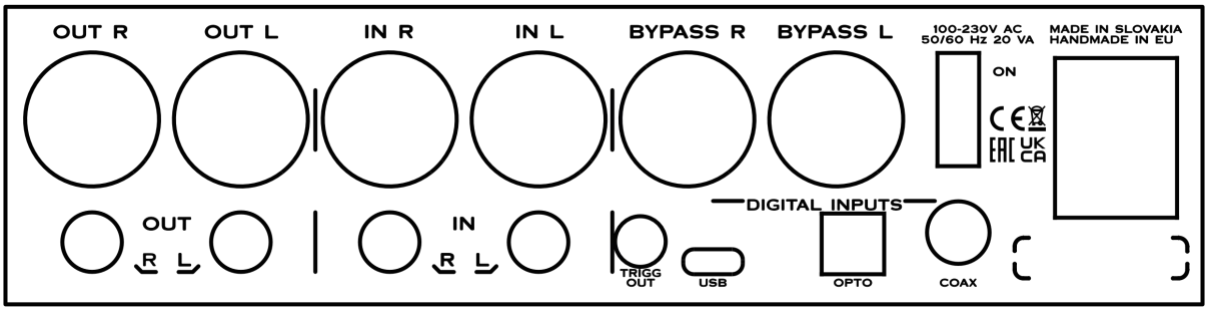
The Crius H5S can also be used as a preamplifier. Tapping the headphone icon at the bottom of the display deactivates the headphone output and activates the preamplifier line output. An activated line output is indicated by a crossed-out headphone icon.



Tapping the headphone icon again deactivates the line output and activates the headphone output.

BACK PANEL

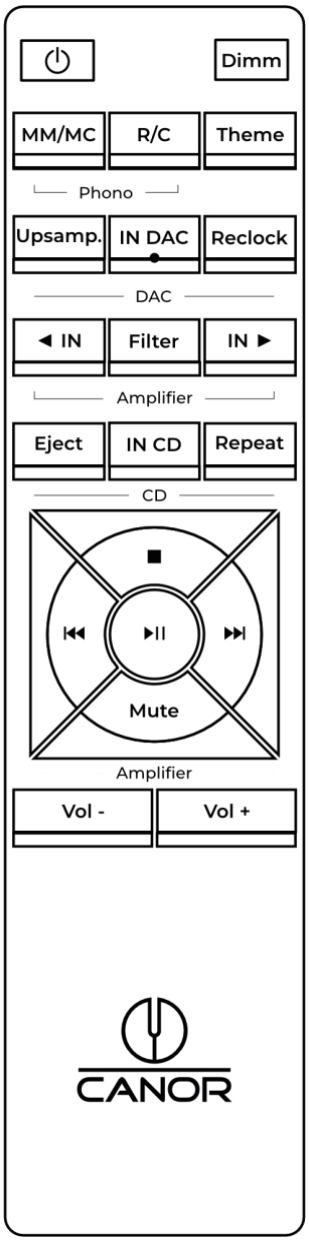
- **OUT R / OUT L** – XLR analog outputs – Balanced
- **OUT R / OUT L** – RCA analog outputs – Unbalanced
- **IN R / IN L** – XLR analog inputs – Balanced
- **IN R / IN L** – RCA analog inputs – Unbalanced
- **BYPASS R / BYPASS L** – XLR analog Bypass outputs – Balanced (Bypass for XLR IN R / IN L)
- **USB Digital Input** – USB Type-C digital input
- **OPTO Digital Input** – Optical digital input
- **COAX Digital Input** – Coaxial digital input
- **TRIGGER OUT** – 3.5mm jack trigger output (12V)
- **Power Switch** – Mains power switch
- **Power** – Mains power inlet



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 color and strength of the glass).

The remote control is compatible with your Headphone amplifier, Preamplifier and DAC built into the Crius H5S.



General features

- ⏻ – Turning the device on and off.
- **Dimm** – Sets the display brightness in steps.
- **Theme** – Switch 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

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

Amplifier / Preamplifier / Headphone Amplifier 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 Crius H5S.

BASIC FUNCTIONS OF REPRODUCTION

Ensure that all inputs and outputs are connected while the Crius H5S is turned off or disconnected from the mains.

1. Connect the power cord to the Crius H5S.
2. Turn on the Crius H5S 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.
4. A power-off sequence will also occur when the unit is turned off.
5. During the first power-up or when the main power supply is disconnected, the USB input will be pre-selected, and the volume level will be set to –44 dB.

OPERATION OF THE CRIUS H5S

The Crius H5S features a 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 startup sequence, which is graphically represented on the display by a CANOR logo / CRIUS H5S typeface and a circular countdown timer. Once the sequence is complete, the device automatically switches to the default or last selected input and information about selected volume level is displayed.







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 power-off sequence, which will be visually represented by a CANOR logo icon and a circular countdown timer indicating the time remaining until shutdown.

Once the power-off sequence is complete, the device will enter standby mode, and the display will turn off.





VOLUME CONTROL

The volume can be adjusted in 100 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.





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.







Crius H5S features RCA and XLR analog inputs and USB , OPTO and COAX digital inputs.

DIGITAL FILTER SELECTION (available for USB, OPTO and COAX digital inputs)

All Crius H5S digital inputs allow 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. Or 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, L/R Balance for Headphones, Display, Precision Timing, GAIN HP (Headphones), GAIN LINE (Line Output), Factory Reset, and firmware version.

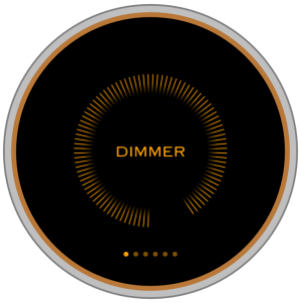
Navigate through the sub-menu by swiping right to view the next page and left to return to the previous page. To exit the sub-menu and return to the main menu, swipe down from the top of the circular display. This swipe action applies to all pages within the sub-menu.

Please note that in the sub-menu, you cannot adjust the volume using the rotary knob.

DIMMER FUNCTION

This feature allows you to adjust the backlight level of the Crius H5S display. 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 touchscreen 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.





L/R BALANCE HEADPHONES

This function allows for fine-tuning balance between the left and right headphone channels. Adjustment ranges is from 0.0 dB to 9.0 dB in 0.5 dB increments. The setting is controlled via a rotary knob. Please note that in the Balance Headphones menu, you cannot adjust the volume using the rotary knob.



DISPLAY

This feature allows you to choose between two theme options of themes for your Crius H5S, as well as selecting Canor LOGO as the display screensaver on the control circular display. When selecting LOGO as a screensaver, it will appear after 1 minute of inactivity in the main menu. LOGO screensaver will disappear when there is any interaction with the touchscreen, rotary knob, or remote control, and it will reappear after another minute of inactivity. Please note that in the Display menu, you cannot adjust the volume using the rotary knob.



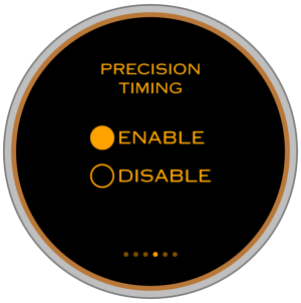






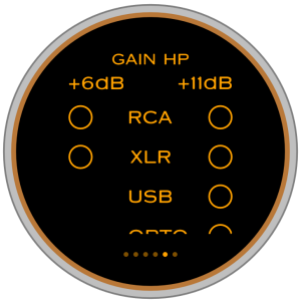
PRECISION TIMING

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 Crius H5S 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 (Disable) to increase the system's tolerance and stabilize the connection.



GAIN HP (HEADPHONES)

This setting allows you to adjust the input gain for the headphone outputs.
Analog inputs: RCA and XLR at either +6 dB or +11 dB. Digital inputs: USB, OPTO, and COAX at +11 dB. By checking the corresponding checkbox, you can set the gain level for each input based on your preferences. 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 GAIN menu, you cannot adjust the volume using the rotary knob. Instead, the knob is used to scroll through the GAIN menu options.



GAIN LINE (LINE OUTPUT)
This setting allows you to adjust the input gain for the line output.
Analog inputs: RCA and XLR at either +6 dB or +11 dB. Digital inputs: USB, OPTO, and COAX at +11 dB. By checking the corresponding checkbox, you can set the gain level for each input based on your preferences. 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 GAIN menu, you cannot adjust the volume using the rotary knob. Instead, the knob is used to scroll through the GAIN menu 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.



ELECTRICAL PROTECTIONS

The Crius H5S is equipped with advanced fault detection and protection features designed to prevent damage to the device. These protection mechanisms guard against incorrect device connections, overloads, and short circuits. If an issue arises, the Crius H5S will automatically switch to standby mode as a precaution.

To resolve any problems, please check all connected devices for incorrect connections or potential short circuits. If the error persists, please contact the service centre or the manufacturer for assistance.

DC PROTECT

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 Crius H5S. In case this error persists, please contact the service center or manufacturer.



RELAY CLEANING

The Crius H5S has a cleaning 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 off, and its progress is shown by the Relay Cleaning inscription on the display during the power-off sequence.



FIRMWARE UPDATE MANUAL

UPDATE REQUIREMENTS

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

UPDATE PROCEDURE

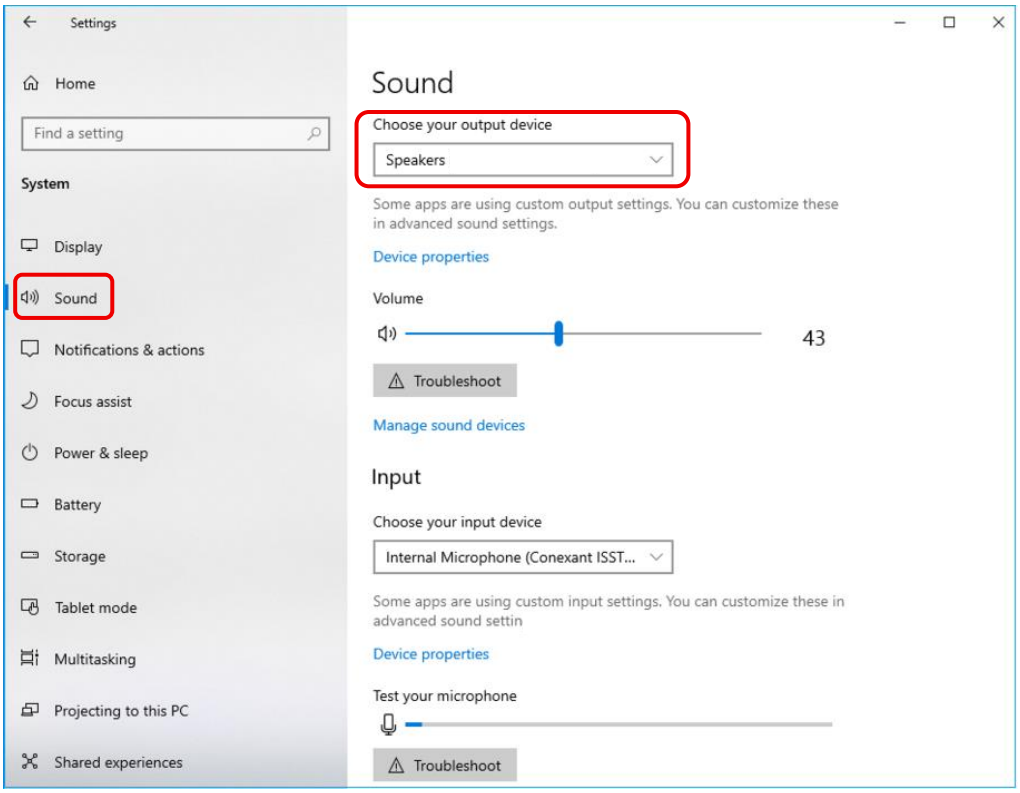
1. Prepare your Windows PC for a firmware update of your Crius H5S product. We recommend that during the firmware update you keep only the Crius H5S connected to the computer and disconnect all other USB devices and USB hubs.

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 Crius H5S and your PC using a USB data cable. The Crius H5S has a USB-C connector on its rear panel.

4. If the Crius H5S 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 Crius H5S will wake up).

5. Verify that communication between the PC and Crius H5S is working by making sure that the Crius H5S 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 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 Crius H5S and press the ">>| Forward" key. This action will definitively switch the device into update mode. Crius H5S 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 "Crius_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 Crius H5S'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 Crius H5S 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 Crius H5S 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 after installation.

14. In the Crius H5S 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.

CAUTION!
The Waste Electrical and Electronic Equipment Directive Regulation of the European Union 2012 / 19 / EU governs the issue of separate waste collection.
This device may not be disposed of in unsorted municipal waste. Devolve the appliance to 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 Crius H5S Headphone Amplifier is guaranteed against any defect in materials and workmanship for 24 months from the date of purchase. The warranty only applies if an original proof of purchase and an 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

Headphone Balanced Output Power	4 W / 30 Ω, 500 mW / 300 Ω
Headphone Unbalanced Output Power	1 W / 30 Ω, 130 mW / 300 Ω
Gain	XLR Output Settings: 0 dB / + 6 dB / + 11 dB RCA Output Settings: – 6 dB / 0 dB / + 5 dB
Balanced Headphone Outputs	4-pin XLR, 4.4 mm jack
Unbalanced Headphone Outputs	6.3 mm jack, 3.5 mm jack
Dynamic Range (Digital)	128 dB (A-wt)
Dynamic Range (XLR)	115 dB (A-wt)
Frequency Range (Max. – 3 dB)	2 Hz – 150 kHz (Preamplifier)
Output Impedance (Balanced/Unbalanced)	< 0.02 Ω
THD (Preamplifier)	< 0.0006 % / 2V
THD (Headphone Amplifier + Preamplifier)	< 0.003 % 500 mW / 30 Ω
Signal-to-Noise Ratio (Digital)	> 128 dB (A-wt)
Signal-to-Noise Ratio (Analog)	> 114 dB (A-wt)
DAC Configuration	2 x ES9039Q2M (Dual Mono)
Digital Inputs	1 x USB-C (PCM up to 32-bit / 768 kHz & DoP DSD up to DSD256 & Native DSD up to DSD512) 1 x OPTO (PCM up to 24-bit / 192 kHz) 1 x COAX (PCM up to 24-bit / 192 kHz)
Filter Settings	9 x Digital Filter
Analog Inputs	1 pair XLR, 1 pair RCA
Analog Outputs	1 pair XLR, 1 pair RCA, 1 pair BYPASS XLR
Input Impedance	RCA: 100 kΩ / XLR: 140 kΩ
Trigger Connector (12 V)	1 x OUT (3.5 mm jack)
Power	100 – 240 V / 50 – 60 Hz / 40 VA
Dimensions (W x H x D)	210 x 75 x 300 mm
Dimensions (W x H x D with knob & connectors)	210 x 75 x 325 mm
Weight (Net)	4 kg
Weight (Gross)	5 kg

CANOR, spol. s r.o., Druzstevna 39, 080 06 Presov, Slovakia

www.canor-audio.com
sales@canor-audio.com
+ 421 51 7710 396