Nubert nuControl X

Operating Manual Application Examples



If you have any questions or problems during the setup of your Nubert system, please do not hesitate to contact our service team. Please have your customer number ready. Phone: +49 7171 87120 · Email: info@nubert.de



Thank you for purchasing a Nubert product!

We recommend reading this manual before you set up your system.

We will explain the setup, the connections, and the daily operation so you can achieve the best possible sound quality and get the most out your new device.

Additionally, it is essential that you also observe the additional safety instructions!

The Nubert team wishes you many hours of musical enjoyment!

Low Temperature, Sound and Safety

If electronic devices are brought from a cold environment into a warm room, condensation may form inside the device - resulting in a risk of a defect or electric shock! Wait at least 6 hours until the device has reached room temperature and is dry before switching it on!

Placement

Please install the nuControl X at a place that provides a flat and stable surface. Ensure that there is sufficient free space around the device for air circulation.

Mount the antennas (included in the scope of delivery) on the threaded sockets on the back of the device. Align the antennas upwards.



For information on application examples please turn the booklet over.

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Rear of the Device, Connections

Make sure all cable connections are made before switching the nuControlX on.

Observe the other steps listed in these instructions.



Inputs	1. Phono input including screw terminal for ground connection and selection of the pickup system via toggle switch (MM/MC).
	Caution! Do not connect any devices with line level here! Otherwise the device may be damaged!
	2. AUX inputs
	3. XLR inputs
	4. SPDIF inputs 2× optical, 2× coaxial (max. 192 kHz, 24 bit)
	5. USB ports USB-A port for storage media, UBS-B for PC or MAC
	6. AES/EBU (max. 192 kHz, 24 bit)
	7. USB port for Nubert accessories
Outputs	8. Analog out XLR Analog XLR outputs incl. sound and volume control
	9. Analog out Pre Analog Line outputs incl. sound and volume control
	10. Subwoofer outputs
	11. Recording outputs analog RCA
	12. Recording outputs digital Optical / Coaxial
Other	13. Screw terminal for radio antenna triple
	14. Network ports in / out
	15. Trigger ports Mini-XLR
	16. Power input socket and switch

A Caution! Connections to other devices should always be made before switching on the power supply!

Front of the Device, Controls



- On/Off with power LED Note: Starting the device can take around 45 seconds. In order to turn it off, hold the button for 4 seconds.
- 2. USB-C for storage media up to 2 TB
- 3. Display (touchscreen)
- 4. Headphone jacks
- 5. Rotary knob for adjusting the volume

Note: The knob is also available in black as optional accessory

- 6. Return/Enter button return to the previous menu / confirm inputs
- 7. Infrared receiver for the remote control

This area should not be covered to ensure the reception of control commands via the remote control.

Display

The display provides information on the current operating status and, as a touchscreen, allows simple, direct and intuitive operation.

Consists of two areas:

- display areas (blue)
- operating areas (yellow)

- is displayed after starting the device

Default view / Main screen



- 1. Date and time (automatic synchronization via the Internet)
- 2. Current audio source
- 3. Status bar
- 4. Current menu: Menu
- 5. Connectivity
- 6. Volume Tapping this area opens the respective sub-menu.
- 7. Sampling rate

Notes:

The **Return** button, situated on the right-hand side of the display, allows going back one menu level. Pressing it multiple times opens up the start screen.

All controls are also accessible via the provided remote control or the Nubert app

(see the corresponding sections in this manual).

Menu

After switching on the nuControlX, the system takes approximately 45 seconds to boot up. The start screen is shown on the display.

The menu can be controlled via the touchscreen display on the front of the device or via the equivalent buttons on the remote control (see page 19). The **Menu** button on the remote control opens or closes the menu.

The **directional pad** on the remote control is used to navigate the menu. You can use the up and down buttons to select the desired menu option. The right and left buttons are used to adjust the selected entry.

Pressing the **Play/Pause** button in the centre of the directional pad confirms the input.

Pressing the **Back** button takes you back one menu level.

Setting Date and Time

Date and time are displayed in the upper left area (1). This information is automatically synchronized via the internet. Alternatively, this information can manually be set in the **Settings > Set time** menu.

Menu

The audio source can be set by tapping on the upper status bar in the display and selecting **Menu** (or by pressing the **Menu** button on the remote control).

This menu offers additional setting options for tone (**Sound**), individual outputs (**Zone**) and device settings (**Settings**).

Sound

Provides setting options for the sound and various equalizers.

Pre-out / Sub HP / Sub LP / Bass EQ

Choose between the rear outputs and the subwoofer. The following are available: equalizer, high/low pass, delay, left/right balance, parametric equalizer as well as bass and treble.



Setting options in the **Sound** menu

Zone

Opens the Zone setup that allows setting up Wireless X-Connect and offers options for the headphone ports.

X-Connect

In order to connect a loudspeaker to the nuControl X wirelessly via X-Connect, firstly activate the loudspeakers pairing mode (for details, refer to the manual of the loudspeaker).

Afterwards, activate the "X-Connect" option in the "Zone" menu of the nuControl X. Navigate to "X-Connect Wireless Setup" and select "Pair" in the following menu. nuControl X will then start to scan for compatible loudspeakers. Once the connection has been established, the paired speaker will be shown on the display.

Setting

Opens configuration settings for the device, such as display brightness, automatic switch-off in standby mode, Bluetooth and network settings and information on the installed firmware.



Auto Power

Standby mode can operate in one of three ways:

- **Auto Power Off** Automatically switch to the energy saving mode after 20 minutes. All features will be turned off.
- **Deep Standby** Network operation, X-Connect and Bluetooth are deactived in standby mode. The standby consumption is less than 0.5 watts.
- Network Standby Wifi, X-Connect and Bluetooth remain active in standby mode. The standby consumption is less than 8 watts.

Note: In order to save energy, the nuControl X automatically switches to the selected Auto Power mode when no incoming audio signal is detected for 5 minutes. The power LED lights up red. If needed, the device can be turned back on using the "On/Off" button.

Bluetooth

Starts the pairing mode for pairing a Bluetooth device. Bluetooth must be activated in the Zone menu (see previous section).

Display

Setting options for display brightness and contrast.

Firmware

Displays information about the installed firmware. If the "Automatic Updates" setting is activated, the nuControl X automatically checks for updates and installs them if an internet connection is available.

Without an internet connection, a USB stick can be used to install firmware updates. In order to do this, the zip file for the update needs to be downloaded from www.nubert.de and has to be copied onto the USB stick. The stick then has to be inserted into the USP storage port (7 – see page 4). The nuControl X unpacks and installs the update automatically after a restart. There might be a confirmation prompt before the update process actually starts.

Setting up an internet connection

Navigate to the "Setting" menu and select the entry "Network & Internet" > "Edit". The following menu allows you to turn on Wifi and select the desired access point from a list of available connections. You can activate the selected access point by entering the network key. The network key can be found on the back of the router. Contact the router manufacturer if necessary.

The nuControl X is fully DLNA and UPnP compatible and can therefore be found automatically in the network.

Note: The nuControl X can also be connected to the router via a LAN cable.

Power Trigger

Activates or deactivates trigger 1 and 2.

Startup

Setting options for which audio source the nuControl X accesses first after being restarted.

Touchscreen CAL

Calibration settings for the touchscreen display.

Setting up streaming services, source selection

The corresponding menu can be opened by tapping on the icons of the available streaming services in the lower part of the display or by pressing the **Internet** button on the remote control.



The corresponding sources can be selected and configured by swiping left or right on the display or by using the arrow keys on the remote control.

The nuControl X preamplifier supports the following streaming services:



Apple AirPlay



Airable (Digital-Radio)



Deezer



Qobuz



Spotify Connect



Tidal

roon Roon Ready Further sources, such as YouTube or Amazon Music, become available when a smart TV or a computer is connected.

Airable (digital radio)

The **airable** feature allows switching to radio mode. A station search is performed automatically.

To select a radio station, tap on > **airable** > **Radio** > **Local stations**. A list of all receivable channels will appear on the right-hand side of the display. Simply select the desired station from that list.

Further options in the airable menu:

Favorites	lists stored favorites.
History	shows the last stations played.
Popular Stations	lists the most popular stations.
Recommendations	lists recommendations.
Trending	shows the most listened to stations in the
	reception area.
High Quality	lists stations with especially high transmission
	quality.
Filter	allows filtering the station list by specific criteria.
Search	starts a manual station search. This can be helpful
	after moving the device.

Renaming inputs

Signal inputs can be renamed individually. Start by tapping on the desired source (e.g. phono or xlr-1) in the (c) area of the start screen. Afterwards, tap on the source's name in the same area to open an entry field. Enter the desired new name and confirm via the Enter button (green checkmark) in the entry field. This completes the renaming process, making it easier to select CD players or other devices directly.

Using the Nubert nuControl X App

The nuControl X can also be controlled via the Nubert nuControl X app. This app is available in the Apple App Store and the Google Play Store at no additional cost. It features advanced setting options and a graphical interface. It is recommended for all users who want to make more detailed adjustments than the on-screen display of the device allows.

Connecting the nuControl X app to the preamplifier

Download and install the app from the Google Play Store or the Apple App Store. Please allow access to location information.

Notes: nuControl X and the mobile device need to be connected to same network in order for the app to work properly. The nuControl X app also uses Bluetooth LE to communicate with the nuControl X. So, Bluetooth should be activated on both devices.

Afterwards, **from within the app**, connect the smartphone/tablet to the preamplifier.

Caution: Do not use the setting menu of your mobile device!



If no device has been connected to the nuControl X app previously, the available devices will be displayed upon starting the app. Alternatively, the device selection can be accessed by tapping the devices symbol (in the lower center of the homescreen). In the following screen, simply tap on the nuControl X you want to connect. The app will signal a successful connection by displaying the device background in yellow. During this process, a prompt to enter a password might appear. On factory default settings this password is 0000.

You can access the start screen by tapping the home symbol in the lower left corner. This screen offers direct access to basic functions such as

source selection. Tapping on the symbol in the upper left corner next to the Nubert logo takes you to the advanced settings for the nuControl X.

Further operation via the app matches the operation via the touchscreen display on the device itself. The various control and menu panels have matching structures.



Remote Control

The remote control allows access to all features of the nuControl X. The menu can be navigated, and settings can be adjusted – just as they can via the touchscreen on the front of the device.

Additionally, the remote control offers convenient quick selection buttons (p1 to p3), which can be individually assigned with a specific function. This allows you, for example, to directly select individual inputs or to turn the Loudness function on or off. The remote control requires a CR-2032 battery (coin cell), which is included in the scope of delivery.

Installing the battery

Open the compartment on the back of the remote control using a Phillips screwdriver. Insert the battery carefully by sliding it into the recess at a slight angle from bottom to top. Make sure the polarity is correct. Afterwards, close the battery compartment again and tighten the screws.

Note: Used batteries must not be disposed of with normal household waste and have to be handed in at designated collection points.

Programming the quick selection buttons (15)

The buttons p1 to p3 can be assigned with specific functions, allowing rapid access to frequently used features. Follow these steps to program these buttons:

- Open the desired function using either the remote control or the display.
- Hold the desired quick selection button for at least 3 seconds.
- The function is assigned and saved; the display shows the message "Saved to preset (number)".

Further notes:

- The on/off button (2) turns the nuControl X on or puts it in standby mode. If the device has been put into standby mode using the remote control or the app, the auto-on function is deactivated.
- The function keys (group 12 to 14) can be used to open the respective sub-menu or to activate the respective input.

Caution! Do not submerge the remote control under water nor expose it to other liquids. The remote control must not be used as a tool in any way (e.g. to pry open objects)!

Explanation of keys

Nr.	button	action
1	Mute	mute the sound
2	Standby	turn standby mode on/off
3	tone	access to further sound settings
4	tone level	opens up the menu for setting treble and bass
5	EQ bypass	switches the equalizer on/off
6	volume	adjusts the volume
7	src	used to set the sampling rate
8	play mode	opens the sound settings menu
9	Steuerkreuz	used for navigation
10	back	back – corresponds to the return button on the device
11	menu	opens the main screen
12	phono, opto, bluetooth	(de)activates phono input, optical input and Bluetooth
13	aux, coax, network	(de)activates AUX and COAX outputs, opens X-Connect menu
14	xlr, usb, internet	(de)activates XLR and USB ports, opens network settings menu
15	p1, p2, p3	quick selection buttons – can be programmed individually



Troubleshooting

Symptom	Cause	Solution	see page
The device does not turn on.	The power cord ist not correctly plugged in.	Connect the power cord firmly to the power input socket of the device and to the power outlet.	4
	Power switch set to "0".	Set the power switch to "1".	4
	The device was exposed to a strong external electric shock (such as lightning or strong static electricity).	Check the fuses and replace them if needed.	4
The remote control is not working correctly.	Low battery power.	Replace the batteries in the remote control.	18
	The remote control is being used at an incorrect distance or angle.	The remote control must be pointed directly at the front of the device. Wo work properly, it needs to be used within a range of 6 meters and with an angle of no more than 30 degrees to the front of the device.	-
	Direct sunlight or other disruptive light sources shine directly onto the sensor of the device.	Relocate the device.	б
	The infrared receiver of the device is blocked.	Position the device so that the receiver is fully accessible.	6

Symptom	Cause	Solution	see page
No sound playback	Source devices are connected incorrectly.	Check the cable connection to the	4, 5
		source devices.	
	Incorrect input selected.	Select the correct input.	18,19
	Volume is set too low.	Turn up the volume. If necessary, also on	6,19
		the source device.	manual of the
			source device
	The source device (e.g. Blu-ray player, gaming	Set the digital outpur format of the source	manual of the
	console) outputs the wrong sound format.	device to PCM.	source device
	Mute function is activated.	Deactivate the mute function by pressing the	
		"Mute" button or by adjusting the volume.	19
Sound can only be heard on	The connection between devices or between	Check the cable connections.	16, 17
one channel	the amplifier and the loudspeakers is faulty.	Read the manuals of the devices.	
		Note the application examples.	45 ff.
	Different volume levels on both loudspeakers.	Adjust the base volume for both loudspeakers.	11
Lack of spatial sound	Loudspeaker distance set incorrectly.	Correct the delay values.	11
	Different volume levels on both loudspeakers.	Adjust the base volume for both loudspeakers.	11
Sound playback lacks crispness	Treble is set too low.	Check the settings in the sound menu.	11
	Improper settings for the equalizer.	Check the equalizer settings for strong attenuation.	11

Symptom	Cause	Solution	see page
Shrill sound	Treble is set too high.	Check the settings in the sound menu.	11
	Incorrect settings for the equalizer.	Check the equalizer settings for extreme amplification or peaks.	11
Low-frequency response appears exaggerated	The bass is set too loud.	Check the settings in the sound menu.	11
	Loudness is activated or set too high.	Check the settings for the Loudness function.	11
	Incorrect settings for the equalizer.	Check the settings for the equalizers and the bass equalizers specifically.	11
	The loudspeakers are positioned very close to the wall or the room is very small.	Employ the high-pass filter setting at 6 dB to counteract otherwise overpronounced levels at low frequencies.	11
		If you can identify individual resonances, e.g. by using sine waves, the equalizer allows for cutting them very pointedly and with high Q factor.	11

Symptom	Cause	Solution	see page
Low-frequency response	Incorrect loudspeaker polarity.	Check the loudspeaker wiring.	-
appears too weak	High-pass filter is activated or set too hight.	Deactivate the high-pass filter or set it to a lower value.	11
	Loudspeaker distance set incorrectly.	Correct the delay values in the sound setting menu.	11
	Incorrect settings for the equalizer.	Check the settings for the equalizers and the bass equalizers specifically.	11
The nuControl X can not establish an internet connection.	The device is not connected to the internet.	Activate the Wifi connection on the nuControl X or connect the device to the router via LAN cable.	4, 5, 13
	Wifi connection cannot be established.	Verify that the network key for your Wifi has been entered correctly.	13
	No internet connection is available.	Verify that the router is connected to the internet. Contact your internet service provider if necessary.	-
The connection to the streaming service cannot be established.	No internet connection is available.	Verify that the nuControl X has an active connection to the internet.	4, 5, 13
	Incorrect login credentials.	Verify that the login credentials for the streaming service have been entered correctly.	-
	The streaming service might be temporarily unavailable.	Check whether the streaming service is accessible on another device (e.g. a smartphone or a smart TV). Contact the streaming service's support if necessary.	-

Symptom	Cause	Solution	see page
No sound playback via Bluetooth.	Source volume is too low.	Set the volume on the source device (e.g. on the smartphone) to the highest level.	-
	The source device might be muted.	Verify that sound output is activated on the source (e.g. volume control in the browser).	-
	The nuControl X might be muted.	Deactivate the mute function.	19
	The Bluetooth connection between devices has not been properly established.	Verify that the devices are properly connected via Bluetooth.	12
The nuControl X gets very warm.	The place of installation does not allow sufficient cooling.	An operating temperature of up to approximately 45°C is normal. If necessary, move the device to a location that offers better heat dissipation. If you get the impression that the device heats up significantly, disconnect the power supply and contact our support.	-

Should you have further questions about your device, please contact our service team. Email: info@nubert.de / Phone: +49 7171 8712-0.

Technical Data nuControl X	High-end preamplifier, network player/streamer
Inputs, Analog:	2× balanced (XLR) 3× unbalanced (RCA) 1× phono MM/MC, (RCA)
Inputs, Digital:	2× S/PDIF optical, max. 192 kHz, 24 bit (TOSLINK) 2× S/PDIF electrical, max. 192 kHz, 24 bit (RCA) 1× S/PDIF electrical, max. 192 kHz, 24 bit (USB-A, port) 1× AES/EBU electrical, max. 192 kHz, 24 bit (XLR) 1× USB client, max. 768 kHz, 32 bit, DSD 512 (USB-B) 2× USB host, max. 768 kHz, 32 bit, DSD 512 (USB-A/USB-C) 1× Bluetooth (SBC, AAC, aptX [™] HD, aptX [™] Low Latency) 1× Nubert X-Connect-Hi-Res wireless standard 1× Ethernet (RJ45 / Wi-Fi)
Outputs, Analog:	$1 \times$ balanced, regulated (XLR) $1 \times$ unbalanced, regulated (RCA) $2 \times$ Subwoofer mono, regulated (RCA) $1 \times$ unbalanced, unregulated (RCA)
Outputs, Digital:	1 × S/PDIF optical, unregulated, 192 kHz, 24 bit (TOSLINK) 1 × S/PDIF electrical, unregulated, 192 kHz, 24 bit (RCA) 1 × Nubert X-Connect – Hi-Res wireless standard 1 × USB, power supply (USB-A, 5V, 1.8A)

Headphone Outputs:	1 × unbalanced (6.3 mm jack plug) 1 × balanced (4.4 mm jack plug)
Trigger:	2×12 Volt, 100 mA (Mini-XLR)
Tone Control:	Bass control / mid-high control, executed as "Klangwaage" (tone scale)
Loudness Control:	Integrated
Equalizer:	Automatic room measurement XRC Advanced 7 bands, fully parametric
Frequenzweichen:	$1 \times$ high-pass for main speakers, fully parametric $1 \times$ low-pass per subwoofer, fully parametric
Delays:	$2 \times$ for main speakers, max. 15 meters $2 \times$ for subwoofers, max. 15 meters
Signal-to-noise ratio:	126 dBA (SPDIF input) 124 / 121 dB (balanced / unbalanced input) 100 / 86 dBA (Phono MM / MC input)
Residual Noise:	2.5 μVrms (A-weighted)
THD+N:	0.0005 % (A-weighted)

Frequency Response:	10-80 000 Hz (+0/-0.5 dB)
Power Consumption:	Operation: 42 watts / Standby Mode: < 0.5 watts / Network Standby Mode: < 8 watts
Dimensions:	$43 \times 11 \times 39$ cm (Width × Height × Depth)
Weight:	11.2 kg
Colour:	Black

◀ Operating Manual

Technical changes, errors and misprints excepted. More information on this product is available here: https://www.nubert.de/downloads You will find our General Terms and Conditions (AGB) on our website: www.nubert.de/agb.htm



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