

nuConnect ampX

integrated amplifier

Wireless Connector

safety instructions

operation manual

Technical specifications

Warranty Policy



nubert®

Device Approval and Compliance with EC directives

Nubert electronic GmbH hereby declares that this product complies with Directive 2014/53/EU, provided it is installed and used in accordance with the manufacturer's instructions. The full text of the EU declaration of conformity is available at the following internet address:

<https://www.nubert.de/konformitaetserklaerungen/716/>

- The serial number on the device must not be changed. She is part of the operating permit. If the device is not authorized by Nubert repaired or modified by workshops or other third parties, it loses its operating license.
- It is only allowed to connect accessories and devices which in turn comply with all legal requirements and are approved.
- The device may only be used for the purposes specified in the "Intended Use" section mentioned applications are used.

Intended Use

This device is only intended for sound reproduction in dry rooms. Only use the device as described in this user manual. Any other use (particularly safety-related or medical use, outdoor installation such as with specially IP-certified products) is considered improper and can lead to property damage or even personal injury. Nubert electronic GmbH assumes no liability whatsoever for damage caused by improper use.

safety instructions

Before connecting and starting up the device, the operating instructions and in particular the safety instructions must be read in their entirety. For your own safety, be sure to observe all warnings and safety instructions in these operating instructions and on the device. The user is not permitted to carry out any work on the device other than those described. Keep this document so that you have access to it at all times. Furthermore, it is also to be handed over to possible subsequent owners.

Explanation of symbols



The triangle symbol with an exclamation mark (without additional comment) indicates important information for the commissioning, operation and maintenance of the device.

The term **Attention!** next to the triangle symbol indicates a medium risk. Failure to heed the warning may result in property damage.

The concept of **danger!** next to the triangle symbol indicates a high risk. Failure to heed the warning can result in damage to life and limb.



This symbol indicates that you are responsible for the operation of the device read and observe the operating instructions and the safety and warning notices.



This symbol (triangle with lightning bolt) warns of dangerous voltages in the inside the housing and from hazards from electric shocks.



This symbol indicates that the device has electrical protection class 2 corresponds and therefore no earthing is required.



Devices with this symbol may only be used indoors in a dry environment.



Devices marked with the symbol of the crossed-out garbage can must not be disposed of with household waste. Please note the section *Disposal and battery return* at the end of these operating instructions.

General information



Never operate the device unattended!



Danger of electric shock!

To avoid the risk of electric shock, the device must not be opened by the operator. There are no user-serviceable parts inside the unit. Service work and repairs are reserved for qualified specialists authorized by Nubert. In the event of service, please contact Nubert electronic GmbH directly (info@nubert.de)!



Danger of suffocation!

Never let children use the device or the remote control or play with the packaging unsupervised! There is a risk of children getting caught in the packaging film and suffocating. Make sure that children cannot pull any small parts off the devices! These parts, like the remote control battery, could be a choking hazard. If any part is swallowed, contact a doctor immediately!



Risk of injury or damage!

If you move the device, do so with the necessary caution to avoid injuries and damage!



Danger!

Since the device can only be connected to the mains input on the back of the device or by pulling the mains plug can be completely disconnected from the mains, it must be set up in such a way that you have free access to the mains input or the mains plug. If one of the following situations occurs, the device must be switched off immediately and disconnected from the mains. Contact Nubert electronic GmbH (info@nubert.de) immediately!

- The device has been damaged or has been dropped
- The power cord or power plug is damaged
- Objects or liquid have fallen into the device
- The device was/is exposed to excessive moisture or rain
- The device is not working properly or shows a significant reduction in performance
- The device smells burnt, develops smoke or makes unusual noises by himself.



Only use accessories recommended by Nubert!

installation instructions



Danger!

An unstable location may damage the device.

- Only place the device on a level, stable surface sure it can't be knocked over!
- Also make sure that there is no unintentional pull on the cables to avoid knocking over the device or damaging the connection sockets!
- Keep the device away from strong mechanical shocks!



Danger!

Excessive heat build-up inside the device can shorten the life of the device or cause a fire.

- Never cover the back of the device! Make sure that there is at least 10 cm of free space on the back and sufficient air circulation!
- Do not operate the device and the remote control near heat sources such as radiators or stoves!
- Do not expose the device and the remote control to direct sunlight!
- Never set up burning candles or similar open sources of fire the device!

Danger of an explosion!

Installation in unsuitable locations can cause explosions.

Do not use the device and the remote control

- in areas where there is a risk of fire or explosion!
- at extremely low or extremely high temperatures!
- in the vicinity of flammable gases or vapours!
- in the vicinity of heavy dust!
- in the vicinity of easily combustible materials!

Danger of electric shock!

The device carries mains voltage inside and voltages in excess of 35 V AC or DC in areas. It has no special protection against the ingress of liquids or objects into the system. There is therefore a risk of fatal electric shock.

- Never touch the device with wet hands!
- Only use the device in a dry place!
- Do not operate it outdoors or in damp rooms!
- The device must be protected against liquids of all kinds, including dripping and splashing water.
- Do not place any containers with liquids (eg flower vases) on the device or in the immediate vicinity!
- If the device is brought from a cold environment into a warm room, condensation may form inside the device. Wait at least 6 hours before switching on the device until it has reached room temperature and is dry!
- Do not use the device during rapid changes in temperature!
- No objects or foreign bodies may get into the device.
- Should the device come into contact with liquids or should
If objects got inside, please unplug the power cord immediately and contact Nubert electronic GmbH (info@nubert.de)!

Connection instructions

General connection instructions

- Unplug the power cord before doing any wiring on the system change!
- Make sure that all connections have been made correctly and that all plugs are firmly seated in the sockets before you connect the device to the mains!
- For the connections, only use the cables or plug connections provided! Otherwise damage or malfunctions may result.
- If you want to disconnect connections on the device, always pull on the plug, never on the cable!
- Make sure that all plugs are firmly seated in the sockets!
- Only use cables and equivalents recommended by Nubert Accessories!

Danger of electric shock!

Faulty mains supply systems or excessive mains voltage can cause electric shocks.

- All mains supply or antenna systems that are connected to the device must comply with the applicable laws and regulations and be installed professionally by an authorized installer.
- Use only the supplied power cord to connect the device.
The mains cable and its plug must not be modified under any circumstances.
- Make sure that the mains voltage in your area corresponds to the requirements of the device! The correct power supply can be found on the label on the back of the device. It must not be connected to other power supplies.
- Devices of protection class 1 must be connected to the protective conductor of the electrical installation, which is at earth potential. Make sure that the protective earth installation is carried out correctly at the connection point!
- When laying the mains cable, make sure that it cannot be damaged (e.g. due to heating or mechanical stress)! Pay particular attention to the areas of the plugs and distributors!


Danger!

Overvoltages in the power supply (e.g. due to lightning) can damage or destroy the device and power pack.

- An overvoltage protection element can offer a certain level of security against excessively high voltages in the power grid.
- However, the best possible protection against damage can only be provided by completely disconnecting your devices from the power supply and the antenna systems. Therefore, in the event of a thunderstorm or the risk of lightning, pull the mains cable out of the socket and any antenna plugs from your hi-fi system!
- If the device is not used for a long period of time or is left unattended, the power supply should be disconnected. Pull the mains plug out of the socket!

remote control and battery

This product comes with a remote control and a battery. The following must be observed when handling remote controls and batteries:

 If the batteries are discharged, the range of the remote control decreases significantly. In such a case, replace the batteries immediately. Always use high-quality CR2025 lithium button cells as replacement batteries. When inserting the battery into the battery compartment, pay attention to the correct polarity by paying attention to the + and - signs in the battery compartment!

Danger!

Improper handling can lead to property damage.

- Do not drop the remote control!
- Do not bring the remote control and the battery into contact with water or other liquids!
- Do not operate or store the remote control and battery in places with high humidity or particularly high or low temperature!

Danger!

Leaking or exploding batteries can pose a risk to your health and cause property damage.

- If you do not use the device for a long time or if the batteries are exhausted, remove the batteries from the remote control to prevent discharge, acid leakage or explosion.
- Leaking batteries must be replaced immediately.
- If you find a leaking battery, do not touch the leaking material and dispose of the batteries immediately! • Do not touch leaking batteries! • If your skin, eyes or mouth come into contact with the spilled material, immediately clean the affected area with water and contact a doctor immediately!

Danger of internal chemical burns!

Swallowing batteries can cause severe internal burns and death within a short period of time.

- Take care that batteries do not enter your body in any way, especially cannot be swallowed!
- Keep new and used batteries away from children.
- If the battery compartment does not close securely, do not use the product more and keep it away from children.
- If you suspect that batteries have been swallowed or have entered the body in any other way or have been inserted into any part of the body, contact a doctor immediately!



The crossed-out wheeled bin symbol on batteries reminds you not to throw them away with household waste. Observe the Disposal and battery return section at the end of these operating instructions.

Unpacking and scope of delivery

Unpacking

When you unpack your nuConnect ampX, do not use any sharp or pointed objects to avoid possible damage to the housing. Please keep the packaging in case you need to transport the device at a later date.



Setting up

Set up the nuConnect ampX in a level, stable place.

Make sure that there is enough free space and air circulation around it.

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

scope of delivery

If the delivery is complete, it will contain the following parts: 1 nuConnect ampX

1 remote control with battery

2 Funkantennen

1 mains cable, 3 m

1 HDMI-ARC-Adapter

Signal cable:

– SPDIF-Coaxialkabel, 3 m

– Stereo jack to cinch cable (3.5 mm jack to cinch), 1.5 m

– Fiber optic cable with TOSLINK connectors, 1.5 m

– USB cable (Type A/Type B), 1.5 m

You can purchase additional accessories and cables from our online shop at www.nubert.de or contact our hotline

directly – free of charge within Germany on 0800 6823780

– from outside Germany/internationally 0049 7171 92690 118



nuConnect ampX with 2 screw-on radio antennas



Remote control with battery



HDMI-ARC-Adapter



SPDIF-Coaxialkabel, 3 m



Stereo jack to cinch cable
(3.5 mm jack to cinch), 1.5 m



Fiber optic cable with TOSLINK connectors, 1.5 m



USB cable (Type A/Type B), 1.5 m



Mains cable, 3 m

configuration options

The ampX offers a variety of possible applications. Depending on the desired application, different configurations can be selected in the setup submenu .



setup > single

This is the default configuration. Passive speakers are connected to the speaker terminals of the ampX. Optionally, an active subwoofer can also be connected to the SUB Out socket using a cinch cable. The ampX always allows wireless music reception via Bluetooth and control of the ampX from your smartphone. The wireless music transmission to other Nubert devices in the Nubert Wireless System is deactivated. The standby power consumption is less than 1 watt.

setup > wls slave

In this configuration, the ampX offers the same range of functions as in the **single configuration**. In addition, the reception of music signals from the Nubert Wireless System is activated. To do this, the ampX as a slave must be connected to a corresponding **wls master** as a transmitter. Please refer to the **setup** section on page 11 and the transmitter's operating instructions. The ampX remains fully operable. The wireless signal received is provided at the wireless (**wls**) input and can be selected like any other source. The volume is adjusted independently of the master device. With the radio module activated, the stand-by power consumption is less than 2 watts.



setup > wls master

The range of functions of the **single** configuration is also retained in this configuration. In addition, the transmission of music signals to other devices with the Nubert Wireless System is activated. To do this, the ampX must be connected as a master to a corresponding **wls slave** . Please refer to the **setup** section on page 11 and the receiver's operating instructions. With the radio module activated, the stand-by power consumption is less than 2 watts. In this configuration, it is not possible to receive music signals from the Nubert Wireless System.



Example: Controlling wirelessly connected active speakers

The ampX can be used as a control device to control nuPro X active loudspeakers (and nuSub subwoofers) and to supply audio signals wirelessly. The source devices are all connected to the ampX, which avoids unnecessary cable routes to the active speakers. The appropriate channel (left, right or mono) is selected on the nuPro X active speakers before it is configured as a **wls slave** .

Example: Multiple listening zones (volume adjustment zone ctrl)

In addition to the passive loudspeakers connected locally via cable, compatible loudspeakers or devices can be connected wirelessly to transmit the music to other rooms or areas. The volume of the wirelessly connected devices is always controlled together with the volume of the locally connected passive speakers. The relative volume level of the slave speakers can be adjusted in the **zone ctrl** submenu (see page 11).



Connections and signal inputs

The nuConnect ampX is completely wired before switching on, see also our separate commissioning brochure.

Using the remote control or the Nubert X-Remote app, select from the input sources which of the connected devices you want to hear.

Phono input: Connection of a turntable

including screw connection for ground connection and selection of the pickup system MM/MC via toggle switch.

Link output

Output of the currently heard signal with a fixed level. Format: SPDIF 96 kHz, 24 bit

2x optical inputs: Source devices with optical digital output

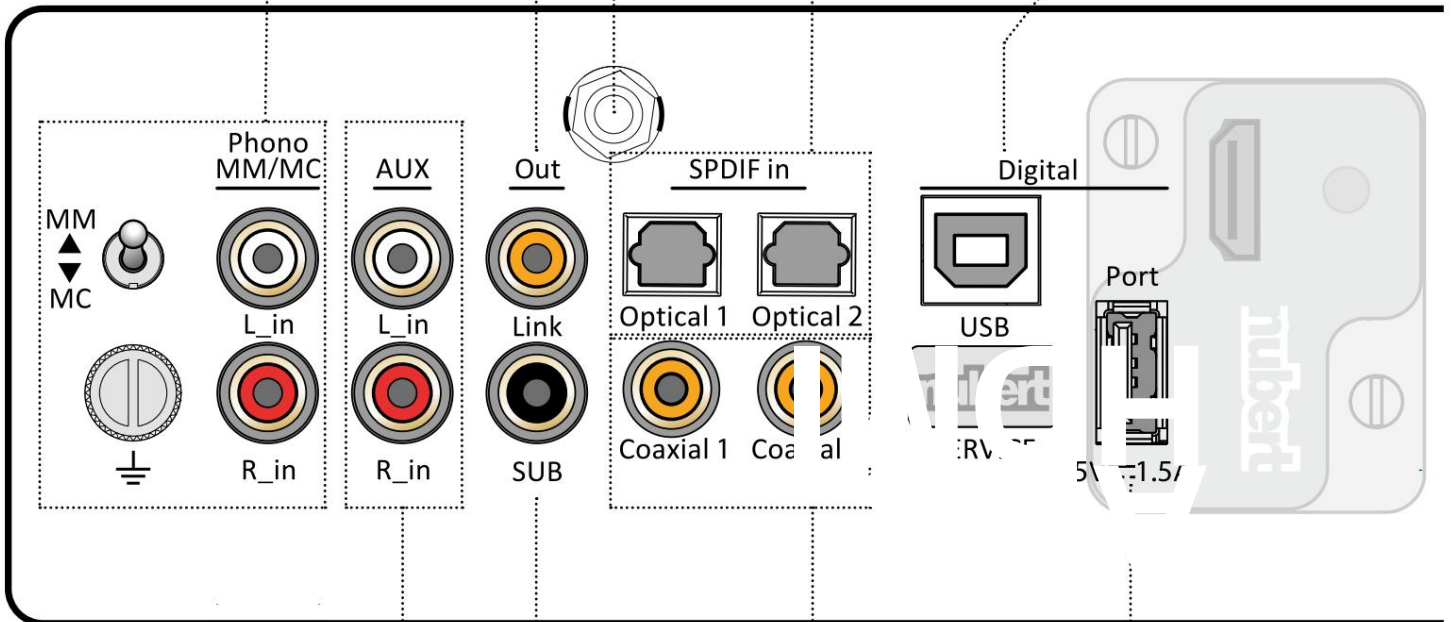
for example
 – various network players (e.g. Apple TV)
 – TV set
 – game console

USB input:

Source device with USB connection such as computers and laptops.

The ampX takes over the task of the sound card. Also note the information on Page 8, USB connection section on computers.

Screw terminal for radio antenna (included)



AUX input: source device with analogue line output

for example
 – CD-Player
 – various network players
 – Preamplifier or AV receiver
 – PCs/laptops and TVs with a 3.5 mm headphone jack

SUB output: connection one active subwoofers

It will be a analog line signal output.

2x SPDIF inputs source devices with electric Digital output

for example
 – CD-Player
 – various network players
 – Satellite receiver

USB-Port

The port provides a 5V/1.5A power supply to power the power supply of an additional device (e.g. radio receiver or smartphone).

At the same time, it creates another digital audio input: Specially designed devices such as the Nubert HDMI ARC Dongle can use this interface also transmit sound signals.

Bluetooth input

The connection options of a nuConnect ampX also include wireless Bluetooth input selection for wireless music transmission from a smartphone, tablet or similar device.

wireless input

for wireless signal transmission from other compatible Nubert devices, for example
 – nuPro X Aktivlautsprecher
 – nuConnect ampX



Nubert HDMI ARC dongle

Connections, signal outputs

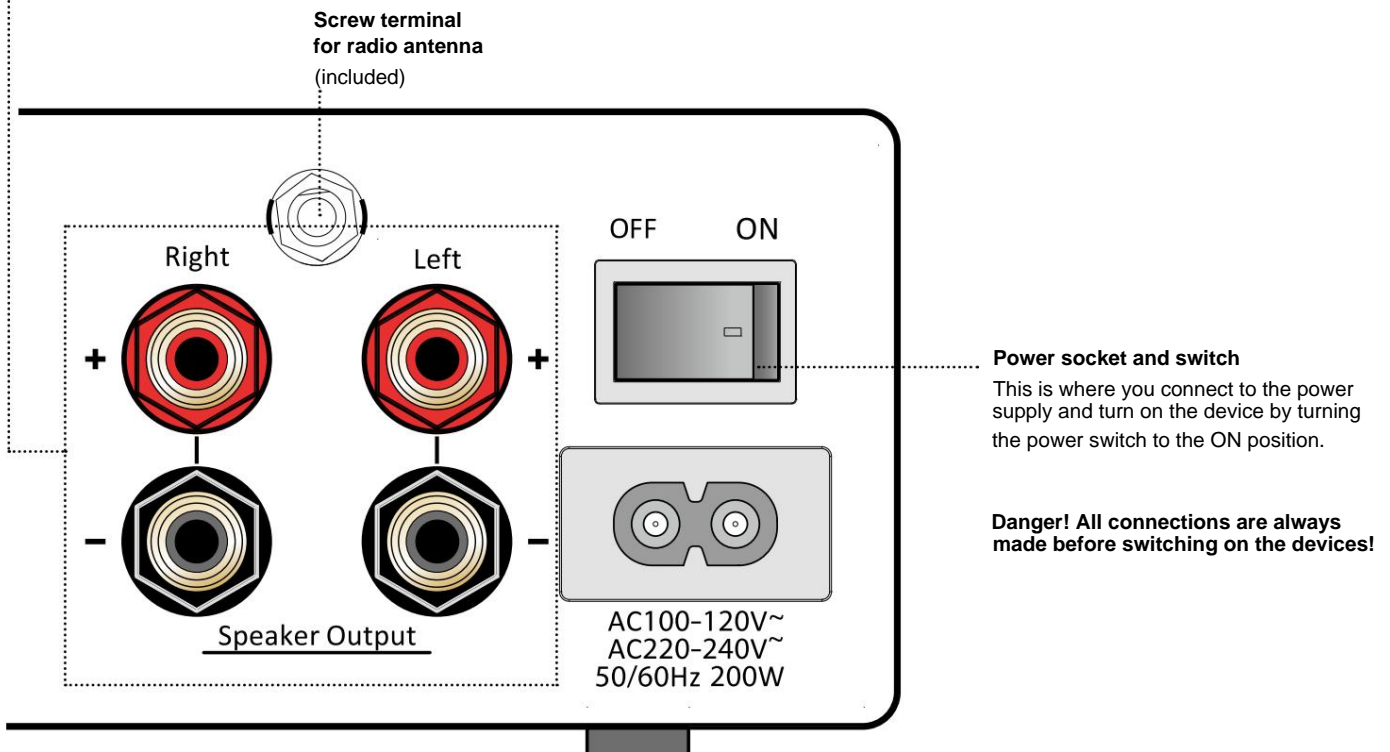
speaker terminals

For connecting passive loudspeakers.

Danger! Make sure that the bare wires of the connection cables do not touch each other or other metal parts of the housing! Be sure to observe the correct polarity when wiring.

If you accidentally swapped the plus and minus poles of one of the channels, this will not cause any technical damage, but you will get a completely diffuse and weak-bass sound pattern in which it is no longer possible to locate the center.

If you use cables without attached adapter plugs, the ends of the cables must be stripped of approx. 10 mm of insulation and twisted so that no individual wires protrude (danger of short circuits!). The bare end of the cable can now be inserted into the screwed-on cable clamp from the side. Then tighten the screw connections again sufficiently! Alternatively, banana plugs from the Nubert range of accessories can also be used. Holes are provided in the screw terminals for convenient connection of these plugs. This allows them to be plugged directly into the sockets after the protective plastic covers have been removed from the holes.



USB port on computers

Select the **USB input**.

Windows 10

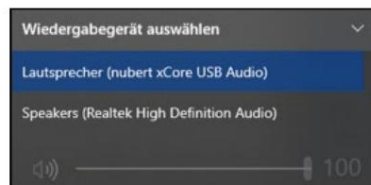
Automatic setup

Connect the nuConnect ampX using a suitable USB cable (included) and switch it on. Windows normally installs the appropriate driver automatically and sets the ampX as the new default playback device. The setup is now usually complete.

Manual playback device selection

If the ampX has not been automatically set as the currently active playback device, or if you want to change the playback device manually, you can do this in the following ways:

1) By clicking on the speaker icon in the taskbar. You can see the currently active playback device above the volume control. You can click on this and switch to the *nubert xCore USB Audio* device .



2) In the Windows settings under > System > Sound you will find the corresponding drop-down menu for device selection.



Manual selection of output format in common mode

Windows allows you to specify the output format in which music data is passed on to the USB-DAC in shared mode.

Open Windows Settings and navigate to

> System

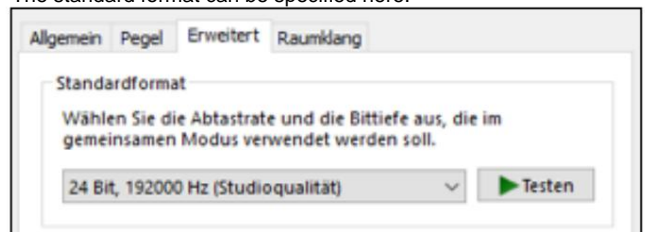
> Sound

> Device Properties >

Additional Device Properties

> Advanced tab

The standard format can be specified here.



Note: This does not affect the playback of applications that work in exclusive mode. Here the playback format is determined by the application.

Manual driver installation

As an alternative to the Windows driver, you can also download a suitable driver from <https://www.nubert.de/downloads/61/> and install it.

macOS

Automatic setup

Connect the nuConnect ampX and the computer using the included USB cable and turn it on. macOS normally installs the appropriate driver automatically and sets the ampX as the new default device for sound output.

Manual selection of the sound output device

If the ampX is not automatically set as the currently active device for sound output, or if you want to change the playback device manually, you can do this as follows:

In the system settings navigate to

> Hardware

> Ton

> output

Select the *nubert xCore USB Audio* item from the list of available audio devices .



remote control

The remote control of the nuConnect ampX allows direct access to the functions that are constantly required:

on/off

Use the on/off button to activate the ampX or switch it to stand-by mode.

If the ampX has been put into stand-by mode using the remote control or app, the automatic switch-on is deactivated.

volume and x

The volume can be adjusted using the volume buttons. The x button mutes and unmutes. Please also note the *Mute Functionality* section on page 14!

tone

The remote control also allows an uncomplicated adjustment of the sound character.

The tone button calls up the corresponding menu and also allows switching between the submenus **bass**, **mid/high** and **loudness**.

The two arrow keys above **tone level** can be used to make settings in the relevant submenu, such as increasing or decreasing the bass intensity or adjusting the mid/high range by up to +/- 10 dB. In addition, the loudness effect can be activated or deactivated. More on this in the sections *Tone Balance* and *Loudness* on page 14.

wide

The wide button is used to select the strength of the wide effect between 0 (deactivated) and 4 (maximum) by repeatedly pressing the button. See the *Virtual Stereo Stage Expansion* section on page 14 for details on this particular DSP circuit that results in greater spatiality and wider stage imaging.



 Wireless

 Coaxial 1
Coaxial 2

 Bluetooth

 To
Phono

 Optical 1
Optical 2

 USB
Digital Port

analog, wls, coax, opto, (Bluetooth) and usb

These six buttons are used to select the source and some have double assignments. Repeated presses toggle between the two sources indicated:

p1 p2 p3

With these buttons you can call up 3 presets directly, which you can make and save in the setup. Alternatively, a preset can be saved by pressing and holding the respective button (see also page 12).

Remote control signals nuPro X series and nuConnect ampX

The remote control signals from the nuPro active speakers and the ampX do not affect each other. This means that combinations of these systems can also be operated without triggering unwanted operations.

However, the nuPro XS Soundbase uses the same remote control as the ampX. It is therefore not recommended to operate these two devices in the same room.

Nubert X-Remote App for comprehensive control and room correction

As an alternative to the remote control, you can also use the Nubert X-Remote app for control, which you can download to your mobile device free of charge via the App Store or Play Store.

With the X-Remote app, all settings of the nuConnect ampX can be made conveniently from the listening position. This applies in particular to the automatic room calibration using **X-Room Calibration**. Room influences often cause interference such as droning or dips in the low-frequency range.

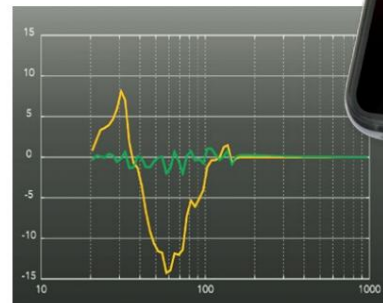
The X-Room Calibration enables the frequency response in the low-frequency range to be optimized using the integrated signal processor, thus ensuring an optimal listening experience with powerful, dry and impulse-true bass.

To do this, simply start the calibration procedure of the app from the listening position. The ampX with the speakers connected now plays back the test noise, which is recorded via the microphone on your smartphone. Based on this measurement data, the app adjusts the frequency curve of the playback so that you can enjoy the optimal sound image at the listening position. You can switch the room correction on or off as you wish.

A notice:

The X-Room Calibration only affects the frequency response of the speakers connected to the speaker terminals. Sub woofers, like wirelessly controlled speakers, are not affected.

X-Room Calibration



Note on entering a password:

You may be prompted to enter a password the first time you connect the app to a compatible device.

In the factory setting, the password is 0000. A different password can be assigned in the menu to protect the device from unauthorized access. If the device is reset to the factory settings (default), the password is also reset to 0000.



Menu navigation and settings

return-Taste

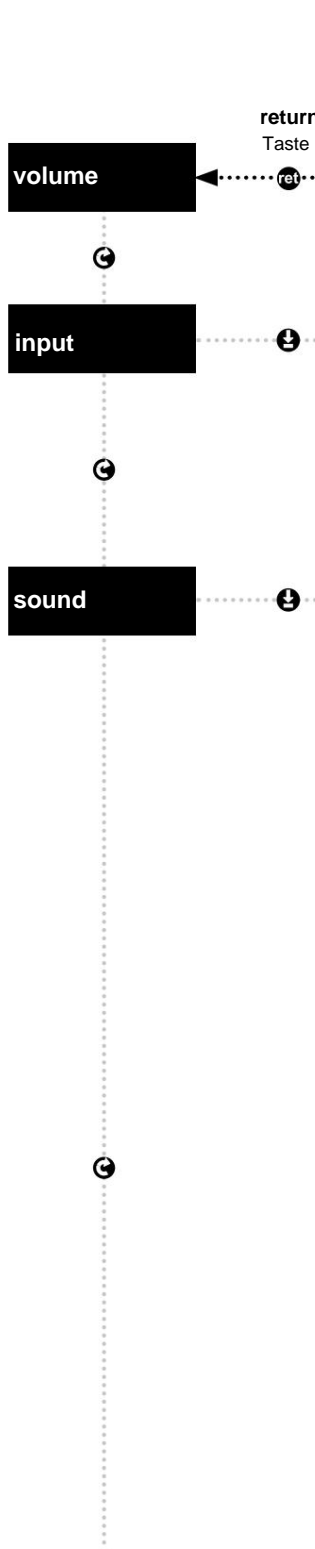
Access from the Volume menu you by pressing the **return** key to the main menu. In principle, you always use this button to switch to the higher menu level.

select knob

By turning the select knob, the various menu items can be called up or settings can be changed.

Pressing the select knob switches to a submenu or confirms a selection made.

TOPMENÜ



SUBMENUS

After switching on the nuConnect ampX, various texts appear on the display. After 11 seconds at the latest (start from stand-by: 6 seconds) the switch to the volume menu takes place.

The volume menu shows the currently selected input (here e.g. coax 1) and the volume. This can be adjusted with the select knob:
 Loudest setting 0 dB
 Quietest setting -100 dB

Use the select knob to choose the source device:
auxAnalog line input
bluetoothAudio streaming input
wireless radio signal input
phono MM/MC.....phono input
coax1, 2Digital electrical input
optical1, 2Digital optical input
usbUSB input
portDigital input

The select knob can be used to increase or decrease the mid/high range by up to 10 dB. See also page 14, section *sound balance*.

The select rotary control can be used to increase or decrease the bass range by up to 10 dB.

With the select knob you can switch between the two stereo channels, a volume difference of up to 10 dB can be set.

With the select knob you can choose between **on** and **off**.

Repeatedly pressing the select knob toggles between the individual bands.
 Turning the select knob raises or lowers the level of each band.

TOPMENÜ

Continued from top menu

setup

zone ctrl

SUBMENUS

wide sound

wide sound 0

In the **wide sound** submenu, you can choose the strength of the wide effect between 0 (deactivated) and 4 (maximum) by turning the select rotary control. See the *Virtual Stereo Stage Expansion* section on page 14 for details on this particular DSP circuit that results in greater spatiality and wider stage imaging.

single

Under this menu item you can specify whether wireless music transmission to other compatible devices such as nuPro X loudspeakers or nuConnect ampX amplifiers should be carried out.

If **single** is selected, radio transmission is disabled; the standby power consumption is less than 1 watt. This is the factory default.

wls master

To transfer music from this device to others, select **wls master** on this device and confirm the selection by pressing the select rotary control. On the receiver, select **wls slave** accordingly and confirm the selection as well.

Note: If necessary, select the channel to be played back in the **channel** submenu on the receiver before configuring it as a **wls slave**.

The stand-by power consumption in wireless operation is less than 2 watts.

wls slave

To transfer music from another Nubert X device (nuPro X speaker or nuConnect ampX) to this, select **wls slave** on this device and confirm the selection by pressing the select rotary control. On the transmitter, select **wls master** accordingly and confirm the selection.

Now switch to the wireless (**wls**) input to play the wirelessly transmitted music. Operation remains fully intact.

The stand-by power consumption in wireless operation is less than 2 watts.

local spk

mute

The **zone ctrl** menu item appears as soon as this device is operated as a **wls master** (see explanations above). In the **local spk** submenu, the locally connected speakers can be muted by selecting **mute** and pressing the select wheel to confirm.

If the menu item **unmute** is selected, the locally connected loudspeakers are reactivated.

wireless

mute

In the **wireless** submenu, the systems connected via radio transmission can be muted by selecting **mute** and pressing the select rotary control to confirm.

unmute

Will the menu item **unmute** selected, the loudspeakers are reactivated.

zone level

level 0 dB

The **zone level** submenu allows a relative adjustment of the volume of the wirelessly connected systems in the range from -10 dB to +10 dB.

Continued on page 12

TOPMENÜ

SUBMENUS

bluetooth

pair

Use the select knob to choose between **pair** and **reset**.

reset

Pressing the select knob while **pair** is displayed starts the pairing process and can be paired with a corresponding smartphone, tablet or computer for one minute.

Pressing the select encoder while **reset** is displayed will clear the memory of the paired devices. This may be necessary if more than 8 different devices have been paired.

channel

stereo

Here you can specify whether the music should be played back in **stereo** or **mono**. This does not affect wirelessly connected slave systems.

advanced

system-hp

hpf 10Hz

The lower limit frequency can be set here. This can be particularly useful when used with a subwoofer. The start value "10 Hz" can be increased in steps of 1 Hertz up to 140 Hz with the help of the rotary control.

subwoofer

lpf 140Hz

Only low tones, i.e. those with a low frequency, are output at the SUB-Out connection. The desired separation frequency can be specified under this menu item. To do this, use the rotary control.

Note: With wirelessly connected subwoofers, the crossover frequency must be set on the subwoofer itself.

analog gain

gain 0dB

The input sensitivity for the analog AUX input can be adjusted in 2 stages (0 dB / +6 dB).

preset

preset 1

Recall one of the previously saved presets 1, 2 or 3 up again by turning the rotary control press.

save as

save as p1

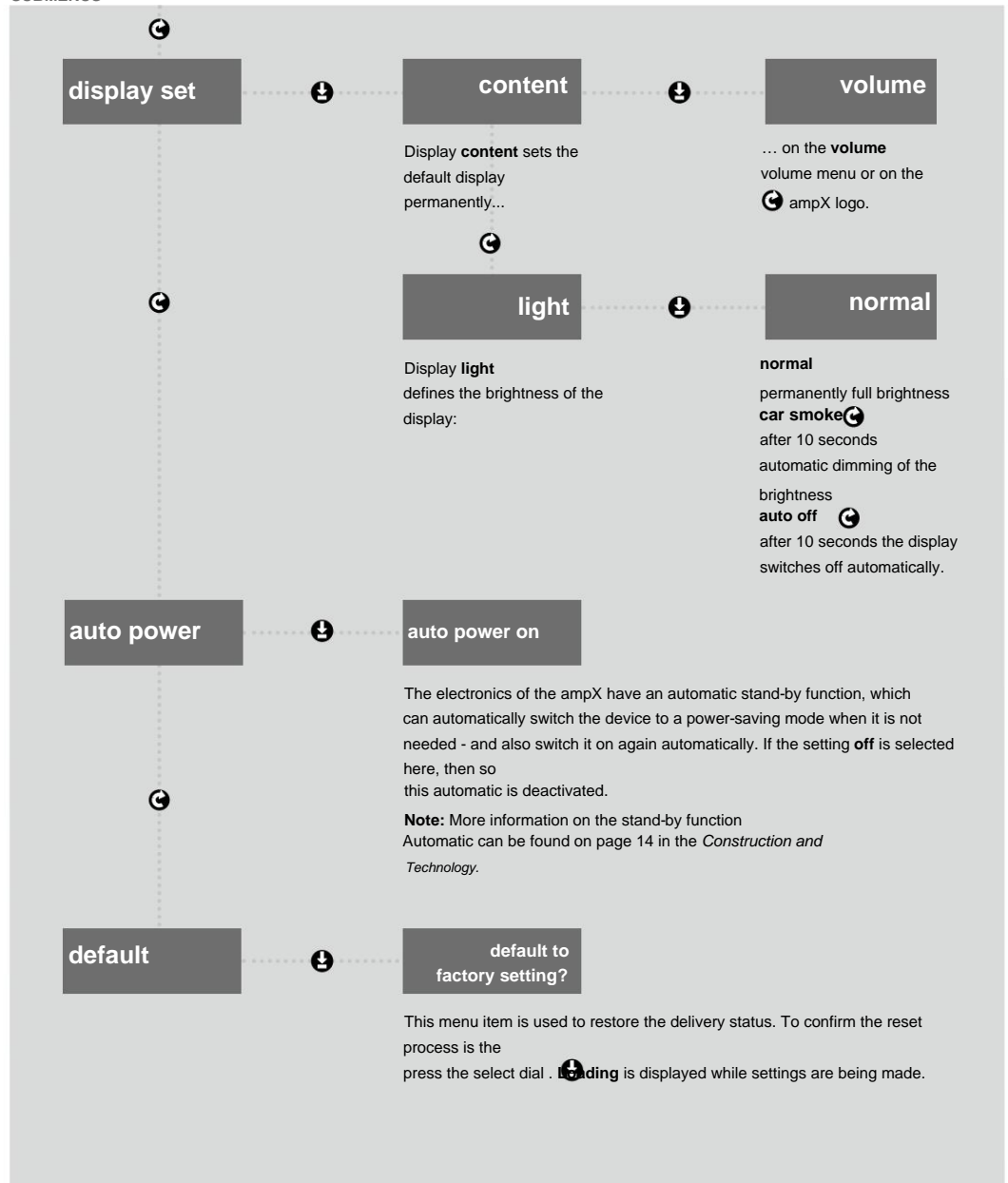
A preset is saved by selecting **save as**. Use the select rotary control to choose from 3 memory locations. Press the rotary control to confirm the saving process. All settings in the **sound menu**, in the submenus **system hp**, **subwoofer**, **analog gain** and the activation or deactivation of **room calibration** are saved.

Continued on page 13

TOPMENÜ

Continuation of the
advanced top menu

SUBMENUS



Note: After settings have been made, the display automatically changes to the permanent operating display of the volume or the ampX logo after 10 seconds. With this change, all settings made are saved.

However, if the ampX is disconnected from the power supply before it is automatically saved, it will load the last saved settings when it restarts.

construction and technology

sound balance

The middle/high adjustment shows the characteristics of a so-called "sound balance" with the ampX. While commercially available treble controls "bend" the frequency response and thus produce over-emphasis in the sound, the frequency response of this controller continuously falls or rises linearly. This means that the basic tonal character of the speaker and the harmony of the sound image are perfectly preserved. The Mid/Hi tone control allows the frequency response to be raised or lowered with a maximum of 10dB at 20kHz.

Analog gain

The input sensitivity for the analog AUX input can be adjusted in 2 stages (0 dB / +6 dB).

digital signal processing

In favor of maximum signal purity, the signal path remains digital as far as technically possible. The signal that is played back is passed over the shortest possible route to a digital signal processor (DSP), which takes over the frequency distribution and optimization of the frequency response. It is also passed on to the amplifier modules digitally, so that maximum freedom from noise and signal precision can be guaranteed.

Tonformat

The ampX processes signals at the digital inputs in *PCM* format. It may therefore be necessary to adjust players such as TV sets or game consoles appropriately. To do this, select *PCM* as the output format in the player menu. Please also note the manual for your player.

Turn off wirelessly connected systems

– ampX as master:

If the ampX switches to stand-by mode (due to the automatic switch-off or manually with the remote control or Nubert X-Remote app), all slave devices connected to it wirelessly follow suit automatically.

– ampX als Slave:

If the ampX is configured as a *wls slave*, for example to receive music from another room via the wireless input, it automatically switches to stand-by mode as soon as the transmitter switches to stand-by mode (requirement: The input selected on the ampX is *wireless*).


When the transmitter is switched on again, a previously paired ampX does not wake up from stand-by mode at the same time. This avoids accidentally activating an ampX in another room.

signal turnaround time

The ampX has a very low signal throughput time of 5.8 ms in the setup as a *single* and in the setup as a *wls slave*. If the device is configured as a *wls master*, the signal throughput time increases to 25.7 ms. This ensures that the audio signal from locally connected speakers and wirelessly connected devices is played in sync.

mute functionality

Locally connected speakers and wirelessly connected speakers and devices can be permanently muted independently. To do this, call up the *zone ctrl* submenu and select the respective devices there (see also page 11).

The xMute button on the remote control can be used to temporarily mute the playback device (*local spk* or *wireless*) in whose submenu the settings were last made. In the delivery state, the xMute button on the remote control operates the locally connected loudspeakers. 

Virtual extension of the stereo stage

A complex DSP algorithm calculates additional spatial information in the ampX, which can be added to the audio signal. This leads to the virtual expansion of the stereo stage. This effect can be set in four stages via the menu or remote control:

- When set to 0, the effect is disabled.
- When set to "1," this effect is more gentle.
- At "4", the additional room information is most added; This mode is particularly recommended when a very effective sound image is desired where the focus is no longer on the precision of the location.

Note: This effect is only played through the locally connected speakers.

Automatic switch-off

The ampX has an auto power off feature that can be disabled in the menu. If one of the inputs *AUX* or *Bluetooth* is selected, it switches to stand-by mode after no more than 20 minutes without a signal. With all digital inputs, it reacts directly to the absence of a digital data stream or the absence of the supply voltage at the USB input. This means that it can be switched off more quickly. The standby power consumption depends on the operating mode, see page 11, section *setup*.

Notes:

The playback devices on the SPDIF inputs must deactivate the data stream accordingly. If you want to use the automatic switch-off in conjunction with the USB input, you must select a USB socket on the player that does not have a permanent voltage.

Automatic switch-on

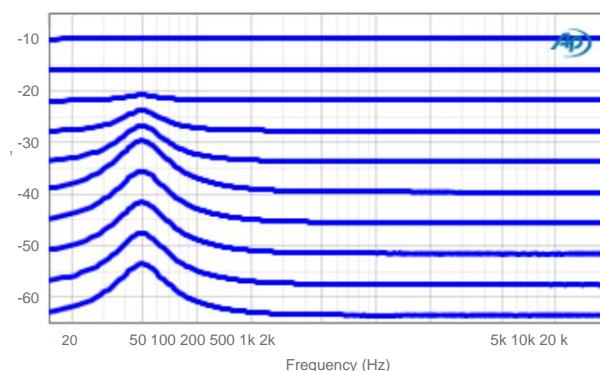
The electronics of the ampX have an automatic switch-on function that can wake it up automatically from stand-by mode. This function is only active if the ampX has been put into stand-by mode by the automatic switch-off. The signal must be present at the input that was selected during the automatic switch-off process. (This function is not for Bluetooth devices

or available at the wireless input.)

Was the stand-by mode manually by pressing the *on/off* button on the remote control or the app, the automatic switch-on is deactivated.

Loudness

With this function, a volume-dependent frequency response correction can be made that is modeled on the character of human hearing. This perceives basses less strongly at low volumes. In order to achieve a full-fledged sound image even at low volumes, low frequencies can be automatically boosted by up to 10 dB by activating the loudness function.



Frequency response correction of the loudness circuit

Specifications nuConnect ampX

principle	integrated amplifier
Inputs analog	1x unbalanced / RCA 1x Phono / RCA (MM / MC, mass connection)
Inputs digital	2x SPDIF electrical (Cinch) max. 192 kHz, 24 bit 2x SPDIF optisch (TOSLINK) max. 192 kHz, 24 bit 1x USB (USB-B) max. 192 kHz, 24 bit 1x Bluetooth (SBC, AAC, aptX™HD, aptX™Low Latency) 1x wireless receiver (screw antennas) for Nubert X models
Analogue outputs	1x stereo speaker terminals (banana sockets, screw terminals up to 6 mm ²) 1x subwoofer, regulated (Cinch)
Outputs digital	1x Link Out SPDIF (Cinch) 96 kHz, 24 bit 1x USB (USB-A) 5V, 1.5A power supply 1x wireless transmitter (screw antennas) for Nubert X models
Continuous output power (0.5% THD+N)	2x 110 Watt (4 Ohm)
Music performance (0.5% THD+N)	2x 130 Watt (4 Ohm)
Minimum connection impedance per speaker	4 Ohm
signal-to-noise ratio	106 dBA (SPDIF IN) 105 dBA (LINE IN)
THD+Women	0.08% (A-weighted)
frequency response	20 – 20 000 Hz (+0, -0,5 dB)
input sensitivity	1V for analog gain +6dB 2V for analog gain +0dB
Max. Input	4.5 Vrms
standby power consumption	0,7 Watt (single) 1,8 Watt (wls master / wls slave) To change the operating mode, see section "setup" on page 11
Radio frequency bands and...	radio transmission power
Bluetoothmodul: 2402 – 2480 MHz	9,81dBm / 9,6 mW
network module (wireless operation): 5180 – 5240 MHz	15,75 dBm / 37,6 mW
5736 – 5818 MHz	15,75 dBm / 37,6 mW
Maße (B x H x T)	23.4 x 6.7 x 19.7/23 cm (D without/with connectors and select knob)
Weight	2,6 kg

Care and cleaning tips



Danger!

Improper handling of the device can lead to damage.

- Always pull out the mains plug before cleaning the device!
- Clean the device regularly with a soft, slightly damp cloth! Mild soapy water can also be used to clean stubborn stains.
- Never use harsh cleaning agents or solvents such as petrol, spirit and the like!
- Before restarting, ensure that all connections are correct, there are no short circuits and the device is completely dry.

Service

If you have any questions or problems when starting up your Nubert system, please feel free to contact our service team:

Phone: +49 (0) 7171 8712-0

Email: info@nubert.de

Please have your customer number ready!

Warranty Policy

Your provider and contractual partner:

Nubert electronic GmbH · Goethestr. 69 73525 Schwäbisch Gmünd Germany
Managing directors: Günther Nubert, Bernd Jung Register court AG Ulm, HRB 700296
Phone: +49 (0)7171 8712-0 Fax: +49 (0)7171 8712-345 E-Mail: info@nubert.de
Ust-IdNr.: DE 16758584 WEEE-Reg.-Nr. FROM 48888173

For questions and individual advice, please call our expert hotline: +49 (0)7171 8712-0
You can reach the hotline team from: Monday to Friday from 10 a.m. to 6 p.m. and Saturday from 9 a.m. to 1 p.m.

Nubert grants the buyer a special manufacturer's guarantee for the Nubert product described in these operating instructions in accordance with the following conditions. The buyer's statutory warranty claims, in particular for subsequent performance and any damage compensation in the event of defects, also remain unrestricted for the buyer and are available to our customers to the full extent.

1. The warranty period for the Nubert product described in these operating instructions with its electronic components is 2 years from delivery.

Your proof of purchase is proof of warranty.

2. Content of the warranty claim

All parts and labor are guaranteed from delivery. It includes and is limited to the free repair or replacement of the defective part in the case of a material defect in the goods (e.g. material defects or manufacturing defects). Nubert also assumes the costs of sending the product concerned to and from it from or to the curb in the case of justified warranty claims, insofar as the goods are located within the states of the European Union and the shipment previously agreed with Nubert. Additional services are possible as a gesture of goodwill at the discretion of Nubert. During the warranty period it is assumed that the material defect already existed at the time of the transfer of risk. Replaced parts become the property of Nubert. Warranty services do not result in an extension of the guarantee period, nor do they initiate a new guarantee period. The warranty period for installed spare parts ends with the warranty period for the whole device. The promise or the execution of warranty services takes place without acknowledgment of a performance obligation according to statutory warranty law.

3. A guarantee claim does not apply to

- Attempted repairs of any kind not previously agreed with Nubert
- improper operating environment or improper storage (e.g. damage caused by moisture or particularly high or low temperatures)
- Improper transport packaging (the original transport packaging, completely used, provides adequate protection)
- Improper transport, insofar as the transport has not been coordinated with Nubert beforehand (Nubert will organize the transport for you with Nubert-selected transport companies transport company. You will receive correspondingly prepaid return tickets)
- improper mechanical effects on the goods (e.g. on housing, switches, connection sockets or antennas) • improper operation/improper operation, improper installation (of e.g. switches, antennas) or improper connection (e.g. operation on defective defective or unsuitable amplifiers or other source devices with DC voltage or unusually large ripple voltage at the source device output).

4. Individually removed components

Do not disassemble any components from our devices and do not send in such individual parts before contacting Nubert Service and receiving them action agreed.

5. Procedure in the event of a warranty claim

If possible, pack the defective device in the original box with a copy of the purchase receipt and a meaningful description of the fault. Please note our shipping information. For a collection or return, please contact the Nubert team:

• Tel.: +49 (0)7171 8712-0 • Fax: +49 (0)7171 8712-345 • E-Mail: info@nubert.de

Of course, you can also hand in your defective product to the Nubert Service in Schwäbisch Gmünd: Nubert electronic GmbH, Goethestr. 69, D-73525 Schwäbisch Gmünd.

Shipping information: We recommend that you keep the original box with the special protective padding. Tip: folding saves space! This is the only way to guarantee a safe return shipment if the worst comes to the worst. If, exceptionally, you use other packaging, it should be professionally protected against the typical dangers of shipping and have special protective padding or equivalent protective devices. We draw your attention to the fact that we assume no liability for damage caused by improper packaging for which you are responsible!

Disposal and battery return

Environmental protection: ingredients, e.g. B. Chemical pollutants in old devices can damage the environment and health if they are not stored properly, especially if they are not unbreakable and not properly disposed of by persons who are not authorized to do so. In the case of illegal exports in particular, there is no guarantee that the environment and human health will be protected from damage. Old devices can also contain reusable raw materials, old devices can be repaired or parts can be reused and thus protect the environment considerably. Old devices must therefore not be disposed of with normal household waste or exported illegally. As the end user, you are legally obliged to return electronic devices or to dispose of them properly.

Batteries: ingredients, e.g. B. chemical type of batteries can damage the environment and health if not stored and disposed of properly. At the same time, reusable raw materials can also be included. Batteries must therefore not be disposed of with normal household waste. As the end user, you are legally obliged to return old batteries. You can return batteries free of charge after use to the seller or to the collection points provided for this purpose (e.g. in public collection points in your community or in shops) or send them back free of charge. You can also send the batteries back to the seller by post free of charge, whereby any requirements of dangerous goods legislation must be observed. The sale at sales outlets is limited to the usual quantities for end users to dispose of, as well as to old batteries that the distributor has or has had in its range.

• Battery take-back

The symbol with the crossed-out wheeled bin (pictured right) reminds you not to dispose of batteries with household waste.

Under this sign you can also find the following symbols with the following meanings about ingredients: Pb = battery contains more than 0.004% by mass of lead, Cd = battery contains more than 0.002% by mass of cadmium, Hg = battery contains more than 0.0005% by mass of mercury.

• Old devices

Electrical and electronic devices are also marked with the symbol of the crossed-out wheeled bin (picture on the right). The icon guides you point out that you, as the owner of this device, are not allowed to dispose of it with the household waste (gray bin, yellow bin, organic bin, paper or glass).

The separate collection of old electrical and electronic devices (old devices) is for the environmentally friendly disposal of pollutants, the recovery of valuable materials and the possibility of reuse is necessary. You can use the device e.g. B. at the approved collection points, for example at the local recycling or recycling center, separate collection from unsorted municipal waste for the purpose of reuse. Waste batteries and accumulators that are not dated Old equipment is enclosed must be separated from it at a collection point before it is handed in.

Old devices can be returned to our shops. You can also send us old electrical equipment for return, ask for this we will provide you with a return label free of charge at info@nubert.de. You can also request this by calling 07171 8712-0. The old device then send it to the following address: Nubert electronic GmbH · Goethestr. 69 · 73525 Schwäbisch Gmünd.

Please make sure that the old device is properly packaged for shipping so that breakage is avoided as far as possible and mechanical compression or breakage can be ruled out.

Old devices may be refused if they pose a risk to human health and safety due to contamination.

Please note that you are responsible for ensuring that personal data is deleted from the old devices to be disposed of.



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nubert[®]

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