

nuLine RS-54

Compact Speaker

Rear Speaker

**Dolby Atmos® Enabled
up-firing speaker**



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CERTIFIED



nubert®

Thank you very much for choosing Nubert loudspeakers.

You will be able to set up your system without any problems if you read these operating instructions carefully. We will explain the operation, connection and installation so that you can achieve optimum sound quality and fully enjoy your new speakers!

The Nubert team wishes you happy listening!

2x



Unpacking and Scope of Delivery

Unpacking

When unpacking your speaker, do not use sharp or pointed objects to avoid possible damage to the enclosure. Please keep the packaging in a safe place in case you need to transport the speaker at a later date.

Scope of Delivery

If the delivery is complete, it contains the following parts:

- 2 speakers
- 2 metal grilles with mounting kit
- 2 loudspeaker cables 0,75 mm² (consider these as „backup“-cables in case you want to get started and don't have any speaker cables)
- 8 large adhesive bumpers
- 8 small adhesive bumpers



Safety Instructions



- Turn off your amplifier before connecting the speaker cables
- Make sure the speaker cables are firmly attached
- Place the speaker in a dry location
- Do not place the speaker in direct sunlight
- Overload protection: the nuLine RS-54 has an internal automatic overload protection fuse, but please be aware that small amplifiers can damage your speakers too. At high sound pressure levels, small amplifiers can start to distort which can damage the tweeters. If the speakers begin to sound harsh or distorted, turn down the amplifier to avoid damage to your speakers.

Low Temperatures and Sound

When speakers are shipped and delivered during the cold months of the year, it is imperative that they adapt to the temperature of the living area. Low temperatures have a considerable influence on the moving parts of a loudspeaker such as diaphragm, voice coil, bead and spider. The ability of these components to follow rapid oscillations or to perform large excursions is thus significantly restricted. This is not dangerous, but "frozen" speakers are far from their acoustic peak.

Hence our tip: When your new speakers arrive on a cold winter's day, just give them a few hours to acclimatise. Your Nubert speakers will thank you with the superior sound quality you have come to expect from us.



Mounting the Speaker Grille

First, mount the spacers on the grille (see the separate grille mounting instructions!), then carefully mount the grille on the speaker by lining up the spacers of the grille with the matching rubber receivers on the loudspeaker and pushing the grille in place. Be careful not to scratch the speaker!

Elastic Bumpers (bumpons)



The bumpons provide firm, no-slip footing for your speakers and do not leave marks or dents.

Do not mount the adhesive elastic bumpers until you are certain you want to keep the speakers. The supplied brand-name bumpers use a strong adhesive and are difficult to remove, especially if they have been attached to the loudspeaker for a longer period of time.

If you wish to remove them, warm them up with a hairdryer or similar before removing them carefully.

Whether you should use the larger or the smaller bumpers depends on the application. Please see page 4 "Setup".

Licensing information:

Manufactured under license from Dolby Laboratories. Dolby, Dolby Atmos, and the "double-D" symbol are trademarks of Dolby Laboratories.

Connections



Please make sure that your amplifier/receiver is switched off before connecting your speakers. For how to connect the speakers to the amplifier/receiver, please refer to the equipment's user manual.

Terminal

You will find the terminal for the speaker cable on the rear of the speaker (when used in reflective mode). The terminal has two binding posts, one with a red marking for plus and one with a black marking for minus. Always make sure that plus on the loudspeaker is connected to plus on the amplifier and minus on the loudspeaker to minus on the amplifier. Reversing polarity will not harm your equipment in any way, but the sound will be diffuse and bass-response and imaging will be very poor. Most loudspeaker cables are marked to make it easy to discern between plus and minus.

If you want to connect the speaker cable directly without any connectors, remove 8 – 15mm of insulation from the end of the cable and twist it so that no individual copper-strands stick out (caution: danger of short-circuit). Loosen the binding post and insert the cable from below. Tighten the binding post firmly!

Speaker Cables

Thin speaker cables are not a good way to transport the electrical signal between amplifier and speaker.

As such, the supplied speaker cables are to be considered an interim solution, in case you didn't order speaker cables with your speakers and do not have quality cables available.

For the RS-54, we recommend using our *nuCable LS 2,5 Studioline* 2 x 2,5 mm² speaker cable for cable lengths under 10 m. For longer cable runs, we recommend the 2 x 4 mm² *nuCable LS 4 Studioline*.

Mode Switch

Between the binding posts, you will find a two-position switch. With this switch, you optimize the sound of the speaker to either the direct-radiating compact speaker- or the Dolby Atmos Enabled up-firing role.

With the switch in the **Direkt (direct)** position, the RS-54 is a normal, direct-radiating compact 2-way loudspeaker. Use this setting if you want to use the RS-54 as your main- or surround-loudspeakers. (more on page 4 and 5)

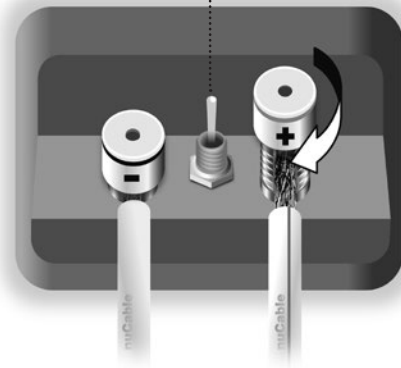
Setting the switch to **Reflektierend (reflecting)** is recommended when using the speaker as a ceiling-reflecting speaker for immersive audio formats. This setting changes the frequency response and dispersion characteristics of the speaker to fulfill all Dolby Laboratories requirements for Dolby Atmos enabled up-firing speakers with Dolby Speaker Technology. The RS-54 is fully tested and certified by Dolby Laboratories



Direct / Reflecting mode-switch

▲ *Direkt (direct)*

▼ *Reflektierend (reflecting)*



Setup and Placement

The RS-54 as a Dolby Atmos Enabled Up-firing Speaker

Home cinema systems capable of decoding immersive audio formats can take advantage of specially designed speakers to "bounce" sound off the ceiling to create the illusion of sound coming from above. In a room with a reflecting ceiling-surface, this works very well. Ceiling height should be 2.2 – 3.7 m for optimum results.

In this case, the RS-54 is placed horizontally on top of your front- or surround-speakers with the lowest edge towards the listener (see below).

The RS-54 is designed to fit on a wide range of speakers, e.g.
 – nuBox 513 or 683
 – nuLine 34, 284 or 334
 – nuVero 60, 110 or 140

When placed on your existing speakers, the speakers will in most cases be in the correct position and add an extra dimension to your surround sound system. It is also possible to place the speakers in close proximity to your front- or surround speakers, e.g. on a shelf. To set up your surround system optimally, we recommend reading the recommendations from Dolby at www.dolby.com or contact our service-hotline experts at: +49 7171 8712-0

■ Switch settings

Set the switch (located between the two binding posts) to **Reflektierend (reflecting)**. With the switch in this position, the RS-54 complies fully with Dolbys requirements for reflecting speakers and is a fully Dolby-tested and licensed Dolby Atmos® enabled speaker.

■ Bumpers

We recommend using the small bumpers to ensure the best possible stability.

The RS-54 as an Effect-speaker, e.g. in the Front- or Rear Height Position

Due to the 20 degree angled front, the RS-54 is perfectly suited for surround channels that are placed above the hearing position, Front- or Rear Height channels for instance.

In this role, the speakers are hung on the wall as shown below. The speaker cables are unobtrusively connected to what is now the top of the speaker.

■ Switch Settings

Set the switch (located between the two binding posts) to **Direkt**.

■ Bumpers

Depending on how far away from the wall you want or need the speaker to be, you can use the large or the small bumpers.

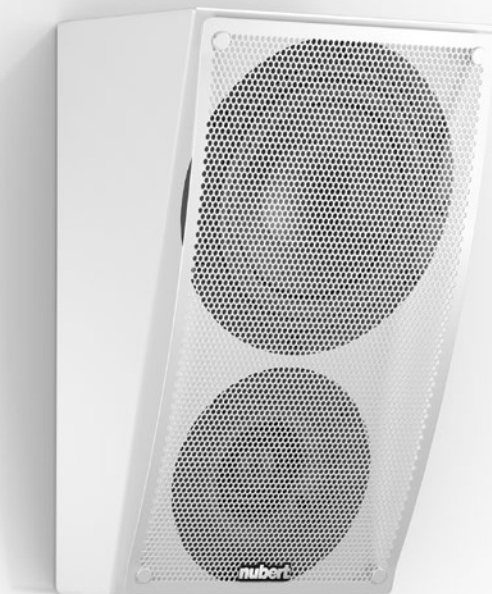
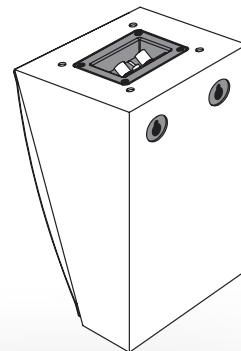


■ Wall-mounting

Always use the appropriate screws and dowels for the kind of wall you want to mount the speakers on.

Make sure the speakers are mounted securely and can't fall down. In order to mount a speaker, you must drill two level holes, 90mm apart horizontally. Please note that you need to leave a few millimeters of space above the speaker in order for the screws to fit into the keyholes on the speaker.

Note the template on page 7!



The RS-54 as a Main- or Satellite speaker in Direkt mode

In the upright position the RS-54 makes an excellent main- or satellite speaker. The 10 degree slope of the front of the speaker is ideal for placements at or slightly below ear-height.

■ Switch Settings

Set the switch (located between the two binding posts) to Direkt.

■ Bumpers

If you want to place the RS-54 on a lowboard or similar, we recommend using the large bumpers to make cable management easier.

■ Stand Mount

The RS-54 can be mounted on suitable Nubert speaker stands (e.g. The MS-67 or BS-652) using the four M4 bushings next to the terminal. The stands comes with spacers for easy and elegant cable management. See the assembly instructions of the speaker stands for further details.

■ Subwoofer

The compact enclosure places natural limits on the bass-performance of the RS-54. If you wish to use the RS-54s as your main speakers in a stereo or surround system, we recommend that you add a subwoofer to complete your system. Adding one or two Nubert subwoofers will fully realize the potential of the RS-54, letting them fill even larger rooms with sound similar to what you get from traditional floor-standing speakers. You can find suitable subwoofers at www.nubert.de.

As a starting point for experimenting, we recommend a crossover frequency of 80 – 90 Hz for the subwoofer. A high-pass filter for the RS-54 is not necessary.



Construction and technology

The nuLine RS-54 is one of the true all-rounders in the Nubert speaker-family. Especially in surround sound systems, the RS-54 can perform virtually every role, in front, behind or above you due to its innovative shape and high sound pressure level capability. Its switchable certified Dolby Atmos® Enabled capability allows it to be used as an up-firing speaker for immersive audio formats, without having to hang speakers high on the walls. If you wish to hang speakers directly on the ceiling, we recommend using speakers from our program with this purpose in mind, e.g. the nuLine WS-14.

Care and Cleaning Tips



Caution!

Improper handling of the speaker may result in damage. Before recommissioning, make sure that all connections are correct, that there are no short circuits and that the speaker is completely dry. Never use strong cleaning agents or solvents such as petrol, spirit or similar!

Enclosure

We recommend commercial window cleaner sprayed onto a cotton cloth. This allows almost all fingerprints and dust to be easily removed. Alternatively, you can also use window active foam. We advise against the use of microfibre cloths! These can cause mini scratches in the surface.

Diaphragms and drivers

To remove dust from a loudspeaker chassis, a lint-free cotton cloth is sufficient to wipe the membrane lightly with very little pressure. All Nubert tweeters are equipped with a protective grille that allows cleaning without risk of damage. If the dust cannot be completely removed, use a small brush, e.g. a make-up brush.

Technical Data nuLine RS-54

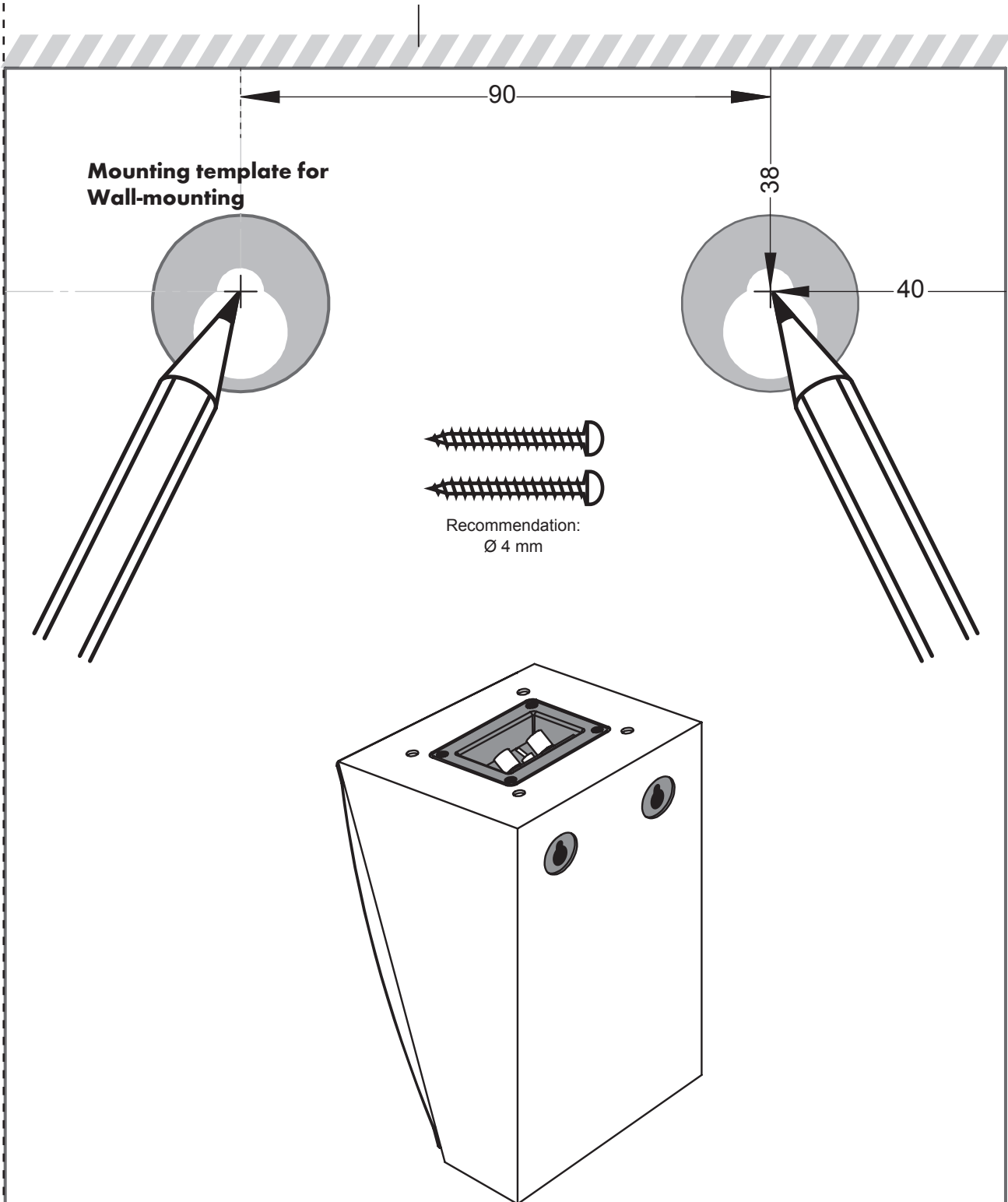
Prinzip	Sealed 2-way compact, multi-purpose / Dolby Atmos® enabled up-firing loudspeaker
Drivers	1x 30 mm silk dome tweeter, 1x 150 mm cone polypropylene LF-driver
Power Handling	90 Watts (DIN EN 60268-5, 300 hour test), 160 Watts peak
Protection	Auto-resetting thermal fuses for drivers and crossover
Frequency response (+/- 3 dB unless otherwise stated):	
– Free standing	117 – 23000 Hz 94 – 29000 Hz -6 dB
– Wall-mounted	113 – 23000 Hz 91 – 29000 Hz -6 dB
Sensitivity	85 dB (1 W / 1 m)
Impedance	4 Ohm
Dimensions	
Height	16.7 / 17.5 cm (without / with grille)
Width	17 cm
Depth	30 cm (lying)
Weight	4.4 kg



■ **Wall-mounting**

Always use the appropriate screws and dowels for the kind of wall you want to mount the speakers on. Make sure the speakers are mounted securely and can't fall down.

In order to mount a speaker, you must drill two level holes, 90mm apart horizontally. Please note that you need to leave a few millimeters of space above the speaker in order for the screws to fit into the keyholes on the speaker.



Warranty terms

Your provider and contractual partner:

Nubert electronic GmbH, Goethestr. 69, 73525 Schwäbisch Gmünd, Germany
Phone: +49 7171 8712-0 · Fax: +49 7171 8712-345 · E-Mail: info@nubert.de

For questions and individual advice, please dial our special number:
+49 7171 8712-0

Managing Directors: Günther Nubert, Bernd Jung · Register court AG Ulm, HRB 700296
Tax ID No.: DE 16758584 · WEEE Reg. No. DE 48888173

Our hotline is available from:
Monday to Friday from 10:00-18:00 and Saturdays from 9:00-13:00.

Nubert warrants the Nubert product described in this manual to the purchaser under the following terms and conditions.

The purchaser's statutory warranty claims, in particular for subsequent performance and, if applicable, damages in the event of defects, shall remain unrestrictedly with the purchaser and shall be fully available to our customers.

1. The warranty period for the passive (no active electronic components) Nubert loudspeaker described in this manual is 5 years from the date of delivery. In the first two years, this applies without restriction. After the second year, the warranty is limited to the functionality of the drivers, connectors and crossover. In particular, optical changes to surfaces (e.g. in the case of foil-coated, painted, veneered, anodized or plastic surfaces) are no longer covered after the second year. Your proof of purchase is the proof of guarantee.

2. Contents of the warranty claim

The guarantee applies to all parts and labour costs from delivery. It includes and is limited to the free repair or replacement of the defective part in the event of a material defect in the goods (e.g. Material defect or manufacturing defect). In addition, Nubert shall bear the costs of the return shipment of the affected product from or to the curb in the case of justified warranty claims, provided that the goods are within the countries of the European Union and the shipment was previously agreed with Nubert. Additional services are possible as a gesture of goodwill in accordance with Nubert's free discretion. For the duration of the guarantee, it is assumed that the material defect was already present at the time of transfer of risk. Replaced parts become the property of Nubert. Warranty services do not extend the warranty period, nor do they set a new warranty period in motion. The warranty period for installed spare parts ends with the warranty period for the entire device. The promise or the execution of warranty services is made without recognition of a performance obligation according to statutory warranty law.

3. The warranty claim does not apply in the case of

- repair attempts of any kind not previously agreed upon with Nubert
- improper operating environment or improper storage (e.g. damage due to moisture or particularly high or low temperatures)
- improper transport packaging (the original transport packaging, correctly used, provides sufficient protection)
- improper transport, if the transport was not previously agreed upon with Nubert (Nubert organizes the transport for you with Nubert selected Transport company. You will receive return tickets with the corresponding postage paid returns).
- improper mechanical effects on the goods (e.g. on housing, switches, connection sockets or antennas)
- improper operation, improper mounting (e.g. switches, antennas) or improper connection (e.g. operation on defective or unsuitable amplifiers or other source devices with DC voltage or unusually high hum voltage at the source device output).

4. Disassembled components

Do not disassemble any components from our equipment and do not send in any such individual parts until you have contacted Nubert Service and agreed on this measure.

5. What to do in the event of a warranty claim

If possible, pack the defective device in its original carton with a copy of the purchase receipt and a meaningful description of the defect. Please note our shipping instructions. Please contact the Nubert team for a return or refund:

• Telephone +49 7171 8712-0 • Fax: +49 7171 8712-345 • E-mail: info@nubert.de

Of course, you can also return your defective product to the Nubert Service in Schwäbisch Gmünd or Aalen:

• Nubert electronic GmbH, Goethestr. 69, D-73525 Schwäbisch Gmünd, Germany • Nubert electronic GmbH, Bahnhofstr. 111, D-73430 Aalen, Germany.

Shipping information: We recommend that you always keep the original carton, along with the protective foam inserts. Tip: Folding saves space! This is the only way to ensure a safe return shipment in the worst-case scenario. If, in exceptional cases, you use a different packaging, it should protect professionally against the typical dangers of shipping and have special protective cushions or equivalent protective devices. We would like to draw your attention to the fact that we accept no liability for damage caused by improper packaging for which you are responsible!

Disposal and battery return

Environmental protection: Ingredients, e.g. chemical pollutants in old appliances, can damage the environment and health if stored improperly, in particular if they are not shatterproof or disposed of properly by persons not authorised to do so. Especially in the case of illegal exports, there is no guarantee that the environment and human health will be protected from damage. Old appliances can also contain recyclable raw materials, old appliances can be repaired or parts can be reused and thus considerably protect the environment. Old appliances must therefore not be disposed of with normal household waste or exported illegally. As an end user, you are legally obliged to return or properly dispose of electrical equipment.

Batteries:

Ingredients, e.g. chemical type of batteries, can damage the environment and health if not stored and disposed of properly. At the same time, recyclable raw materials may also be included. Batteries must therefore not be disposed of with normal household waste. As an end user, you are legally obliged to return used batteries. You can return batteries after use to the seller or in the designated collection points (e.g. in public collection points in your municipality or in the trade) free of charge or send them back free of charge. You can also send the batteries back to the seller free of charge by post, whereby any requirements of the dangerous goods law must be observed. The sale at points of sale is limited to the quantities customary for end users for disposal as well as used batteries which the distributor carries or has carried in its product range.

• Battery return

The symbol with the crossed-out dustbin reminds you not to put batteries in the household waste.

Under this symbol you can also find the following symbols with the following meaning about ingredients:

Pb = battery contains more than 0.004 mass percent lead, Cd = battery contains more than 0.002 mass percent cadmium,

Hg = battery contains more than 0.0005 mass percent mercury.

• Old appliances

Electrical and electronic equipment is also marked with the crossed-out wheellie bin symbol. The symbol indicates that you, as the owner of this appliance, may not dispose of it with your household waste (grey bin, yellow bin, organic waste bin, paper or glass).

You can send the device to the municipal collection points to be collected separately from unsorted municipal waste for reuse. Used batteries and accumulators which are not enclosed by the waste equipment shall be separated from it at a collection point prior to delivery.

Old appliances can also be returned to us directly in our shops or shipped back to us for disposal. Please send an Email to info@nubert.de for a free return shipping label.

You can also request this by calling +49 7171 8712-0. Please then send the old device to the following address:

Nubert electronic GmbH, Goethestr. 69, D-73525 Schwäbisch Gmünd, Germany.

Please ensure that the old appliance is properly packaged for shipment so that breakage is avoided as far as possible and mechanical compaction or breakage can be ruled out. The acceptance of waste equipment may be refused if there is a risk to human health and safety due to contamination.

Please note: You are responsible for the deletion of personal data on the waste equipment to be disposed of.



As of: 26.7.2019

Technical changes, errors and misprints excepted. You will find our General Terms and Conditions (AGB) on our website: www.nubert.de/agb.htm