



## Classic Cantabile string instruments

00037354, 00037355, 00109462, 00109463, 00109464, 00109465, 00109467, 00109468, 00109469



## Instructions

Revision: 01/2025

These operating instructions are protected by copyright. Reproduction of these operating instructions, even in part, is only with the permission of Musikhaus Kirstein GmbH. The same applies to the reproduction or copying of images, even in modified form.

**Contents**

**Intended use ..... 1**

**Structure/components of string instruments..... 3**

**Structure/components of the bow..... 5**

**Delivery of instruments with uninstalled bridge..... 6**

**Generating the string vibration with the bow ..... 6**

**Sound production of acoustic & electric string instruments ..... 7**

**Optimal support with rosin ..... 7**

**Tuning the strings ..... 7**

**Correcting bridge misalignment..... 9**

**Counteract string wear ..... 9**

**Make pegs work..... 9**

**WEEE-statement.....9**

Thank you for choosing this product.

To ensure that you are completely satisfied with this product, read and understand these operating instructions carefully before using our product. Keep these operating instructions in a safe place. The operating instructions must be passed on to all subsequent users.



Observe the operating instructions!



The signal word **WARNING** indicates dangers that could lead to serious injury if precautions are not taken.



The signal word **NOTE** indicates general precautionary measures which should be observed when handling the product.



Images and screen displayed in these operating instructions may differ slightly from the appearance of the actual product, as long as this has no negative impact on the technical properties and safety of the product.



All personal formulations in these operating instructions are to be regarded as gender neutral.

These operating instructions apply to persons who have been supervised or instructed in the operation of the appliance by a person responsible for their safety and who have demonstrated that they can handle the appliance.

All information in these operating instructions has been checked to the best of our knowledge and belief. However, neither the author nor the publisher can hold liable for any damage in connection with the use of these operating instructions.

Other product, brand and company names mentioned in this document may be the trademarks of their respective owners. Compliance with all applicable copyright laws is the responsibility of the user of this document.

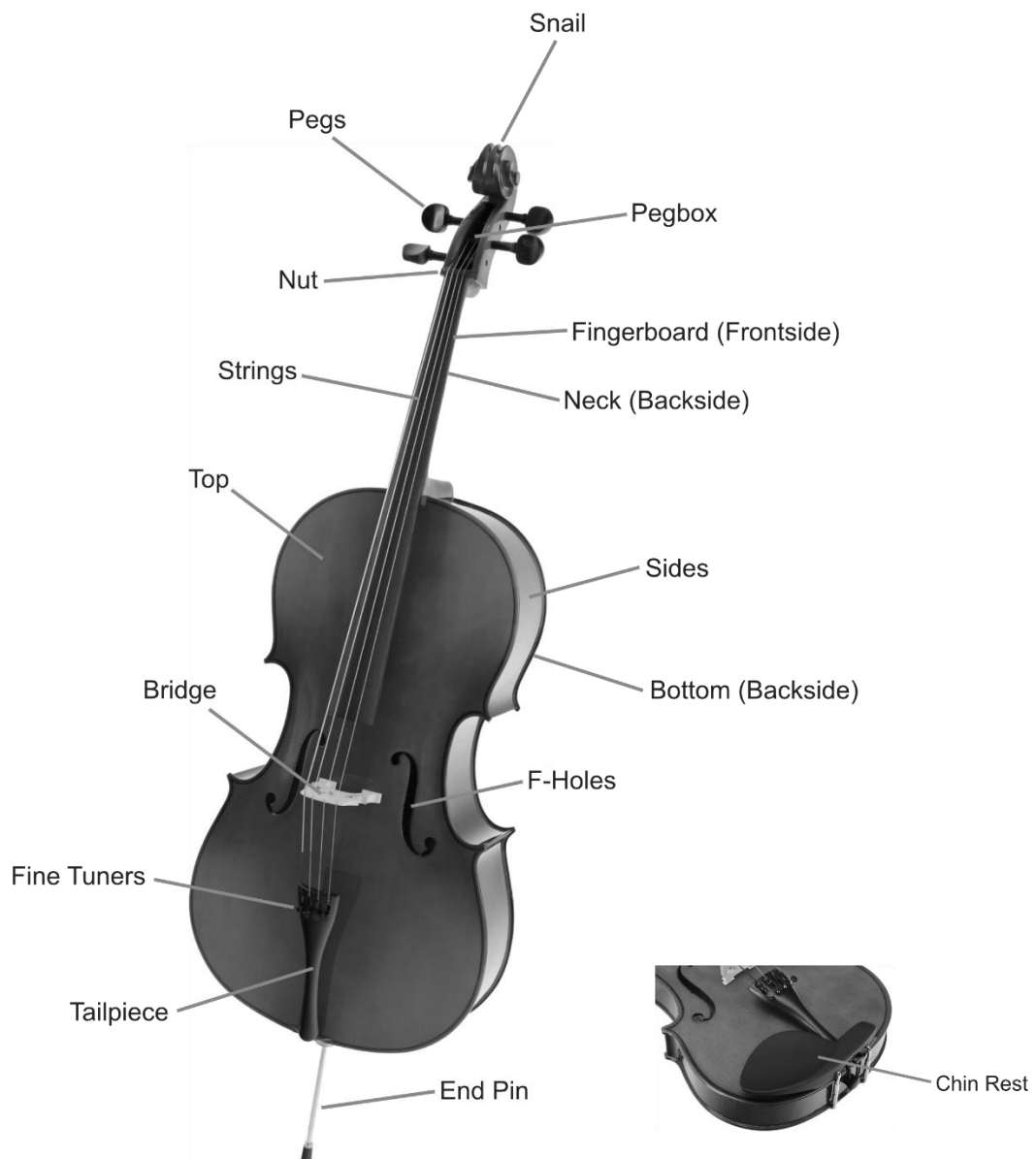
## Intended use



- Only use the product in accordance with the instructions given here. Failure to follow these instructions will invalidate the warranty! Musikhaus Kirstein GmbH accepts no liability for resulting damage.
- Unauthorized conversions or modifications to the product are not permitted for safety reasons and will also invalidate the warranty.
- Do not open or modify the instrument.
- Never use or store the instrument in places exposed to extreme or humid temperatures or rain.
- Do not allow any liquids or moisture to enter the instrument.
- Do not expose the instrument to direct sunlight, do not place it near appliances that radiate heat, do not leave it in a closed vehicle or expose it to extreme temperatures in any other way. Excessive heat can deform or discolour the device.

- Protect the instrument from strong impacts. Do not drop it.
- Do not apply force to the controls.
- Check the item for possible damage before putting it into operation.
- Installation is only permitted on a stable and solid surface. An appropriate substructure may need to be provided.
- Do not place any open light sources (candles, etc.) on or next to the product.
- Never climb on the instrument or place heavy objects on it.
- Keep the original packaging for warranty claims and safe transportation.
- If the instrument is moved from one location to another where the temperature and/or humidity is very different, water droplets (condensation) may form inside the device. Damage or malfunctions may result if you attempt to use the device in this condition. Therefore, allow the instrument to reach room temperature for a few hours before use so that the condensation has completely evaporated.
- For daily cleaning, clean the instrument with a soft, dry cloth. Never use benzene, thinner, alcohol or solvents of any kind.
- Depending on the setting, electronic products in particular can generate a high volume that can cause permanent hearing damage to the user. Therefore, avoid prolonged exposure to high volumes. If you notice hearing loss or ringing in the ears, you should stop using the device immediately and consult a doctor.
- Keep spare parts, batteries and accessories out of the reach of children, as they can be a potential choking hazard.
- The positive and negative contacts of the batteries and battery compartment must match. If the battery inserted the wrong way round, the electronics won't work and the batteries may overheat, which in turn may damage the instrument or cause a fire.
- Handle a broken string with care to avoid puncture injuries to the fingers and other parts of the body.
- As your instrument is largely made of wood, avoid environments with high or low temperatures. Strong temperature fluctuations in the environment can damage the item (e.g. deformation, cracks, discoloration).
- When not in use, place your instrument in a suitable stand on a firm surface or store it in a bag/case.
- Moisture, sweat and fingerprints on the strings or metal parts led to rust and corrosion. Therefore, wipe your instrument with a special dry wipe for string instruments after playing. Instruments with gloss varnish should be cleaned carefully with a soft cotton cloth. A Cloth made of Polyester can scratch the varnish.
- Use a drop of oil (e.g. sewing machine oil) if a fine tuner or adjusting screw can no longer be turned properly. Make sure that not too much oil is used and that no oil drips onto the instrument. Alternatively, we recommend removing the fine tuner from the tailpiece and rubbing the fine tuner with a cold piece of candle wax.
- Do not try to turn the swivel any further if it is stuck immovably, as it could otherwise break.
- Bow hair should never be touched with the hands, as grease is deposited on the bow hair, which means that the rosin no longer adheres properly to this area.
- In general, you should never use too much force or violence when handling the pegs, as strings can break and there is a risk of injury.
- After each playing session, you should relax the strings of the bow and clean the instrument accordingly.

## Structure/components of string instruments



### **Snail**

The snail forms the upper end of the instrument neck or pegbox. It has a purely decorative function.

### **Pegs**

The pegs are rotating pins with conical shafts to which the string ends are attached or untwisted. The tension of the strings is adjusted and the instrument is tuned as a result. Pegs are not only crucial for tuning, but also for the tuning stability of the instrument.

### **Pegbox**

The pegbox is used to hold the pegs via peg holes or side-mounted mechanisms.

### **Nut**

The nut is located at the end of the fingerboard in front of the pegbox. Its function is to guide the strings through the notches so that the strings are held in the correct position.

### **Fingerboard**

The fingerboard is a flat or curved surface that runs under the strings. By pressing the strings down onto the fingerboard, the vibrating part of them is shortened and the pitch of the strings played rises. Typical for string instruments, the fingerboard has no frets.

### **Neck**

The fingerboard is glued to the neck and it connects the body (top, sides, bottom) of the instrument with the pegbox.

### **Strings**

When the strings are plucked or bowed, they begin to vibrate and these vibrations are transmitted to the body (top, sides, bottom) to produce the audible sound.

### **Top**

The top has a major influence on the sound of the instrument. It absorbs the string vibrations via the bridge and amplifies them to produce the characteristic sound of a string instrument.

### **Sides**

The sides are the side walls of the instrument, which ensure the stability of the instrument and also amplify the vibrations of the strings.

### **Bottom**

The bottom is the lower part of the body and also amplifies the vibrations of the strings, which are transmitted to the bottom via the soundpost under the top.

### **F-Holes**

These are two F-shaped recesses (sound holes) in the top. They are used to increase the fullness of the sound and for air equalization.

### **Chin rest (only for violin/viola)**

A chin rest on the instrument ensures a good and comfortable hold of the instrument between the chin and shoulder. It also protects the top from sweat.

### **End Pin (only for cello/double bass)**

The end pin is an extendable rod that can be pulled out from the underside of the instrument. It is used to keep the instrument stable on the floor and ensures that the right height can be set for the player and that the instrument does not slip.

### **Tailpiece**

The strings are attached to the tailpiece in the un-tensioned state simply by hooking them in, then passed over the bridge, fingerboard and nut to the corresponding peg, where they are fixed, wound up and tensioned.

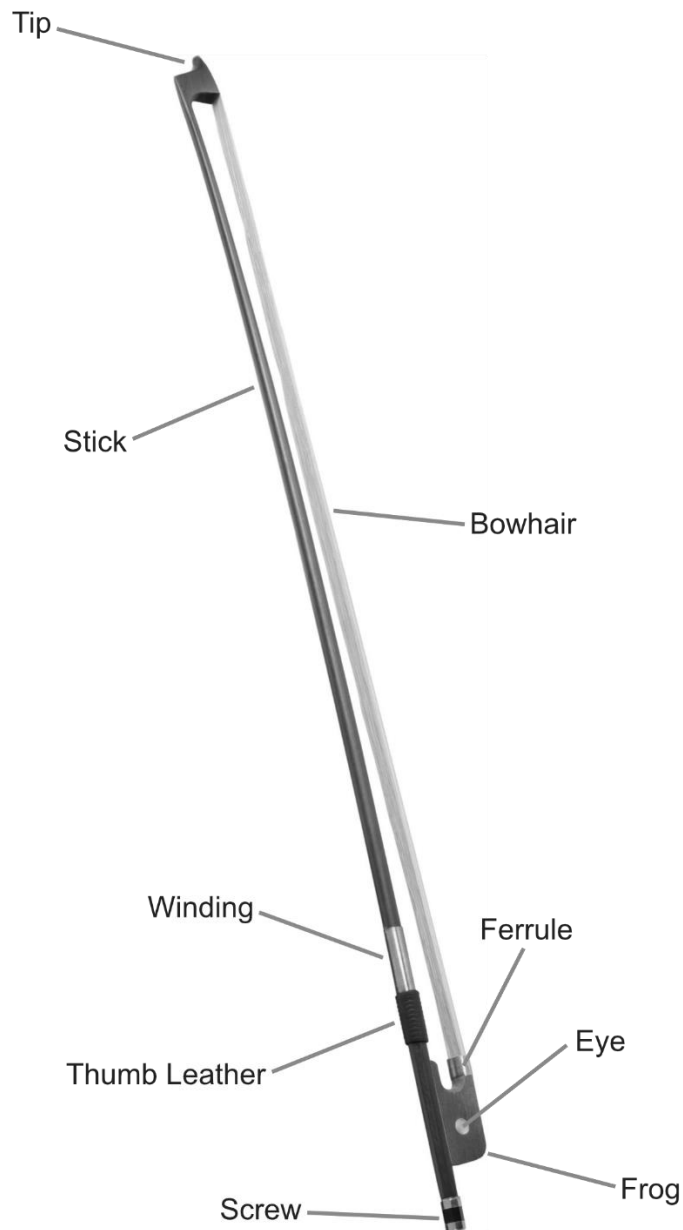
### **Fine Tuners**

The fine tuners are small wheels on the tailpiece that are used to tune the strings particularly precisely in addition to the pegs.

### **Bridge**

The bridge transmits the string vibrations to the body (top, sides, bottom). It is positioned in the middle between the F-holes (and therefore also in the middle of the fingerboard), at the height of the small notches found on the elongated bow of the F-holes.

## Structure/components of the bow



### Tip

The bow tip is an inseparable component at the upper end of the stick, which holds the knotted end of the bow hair.

### Stick

Usually made from Pernambuco wood or brazilwood (nowadays also increasingly from composite or carbon). The stick of the bow plays a key role in tone production and is responsible for balance, strength and elasticity.

### Winding and Thumb Leather

The thumb leather protects the bow from hand perspiration and improves the grip. Together with the winding, the weight at this point of the bow is specifically increased and the center of gravity is thus optimally shifted so that the bow can be guided as well as possible by the musician.

### **Screw**

The frog can be moved forwards or backwards using the screw to tighten or loosen the bow hair.

### **Frog**

Inside the frog there is a screw mechanism in which the bow hair is clamped at the lower end of the bow. It also serves as a finger rest during playing.

### **Eye**

The eye in the frog is purely decorative and has no function.

### **Ferrule**

The ferrule on the frog holds and bundles the bow hair.

### **Bowhair**

The Bowhair provides direct contact between the bow and the instrument. Usually made from horsehair from horse tails, although synthetic bow hair is also available.

## **Delivery of instruments with uninstalled bridge**

Most string instruments that can be purchased online are not delivered ready to play for transportation reasons. This means that the bridge is supplied as a separate instrument part and must first be set up and adjusted by the player. In this context, the strings of the instrument must also be tensioned and tuned. A video with all the important information such as acclimatizing the instrument, adjusting the nut & bridge, setting up the bridge, tensioning & tuning the strings, etc. can be found under the following link or the following QR code:

<https://www.youtube.com/watch?v=1F5Z4FjThl8>



## **Generating the string vibration with the bow**

If you stroke a string with the bow, a longer lasting tone is produced (in contrast to plucking a string at one point). The bow is guided in such a way that it slides back and forth on the string.

During bowing in one direction, the string sticks to the bow up to a certain point. It is pulled in one direction with the movement of the bow and thus stretched in the direction of bow movement until the tension becomes too great, the string releases its grip on the bow and snaps back. This process is constantly repeated during bowing, at a speed that cannot be seen with the naked eye.

The bowed string vibrates continuously, but it never fully stops vibrating as long as it played with the bow. The result is the characteristic, overtone-rich sound of string instruments.

The string vibration of string instruments is produced by the following playing techniques:

- Strings bowed with a bow (coll'arco)
- Strings plucked with fingers (pizzicato)
- Strings struck with percussive percussion bass playing (slap technique, only for double bass)

## Sound production of acoustic & electric string instruments

On acoustic stringed instruments, the vibrations generated by the three playing techniques mentioned above are picked up by the bridge via the strings and transmitted to the bottom via the top and the soundpost underneath. This causes the entire resonating body (top, sides, bottom) to vibrate and the sound is produced and amplified.

Electric string instruments, on the other hand, have an integrated pickup that transmits the vibrations as audio signals to an instrument amplifier, for example. This means that the notes are not made audible/loud via the body (top, sides, bottom), but via external amplifiers and loudspeakers.

### Optimal support with rosin

In order to optimally support the stick-slip effect of your bow, the bow strung with horsehair must be regularly coated with rosin. This ensures good adhesion of the bow hair to the strings. The thicker the strings, the softer the rosin should be, as softer rosin provides better adhesion than harder rosin. After a longer period of time, the rosin could dry out and the sound quality may suffer. You should then purchase a new rosin.

It is best to rosin the bow with the bow hair taut before each playing. Run the bow hairs over the rosin several times with light pressure, both at the frog and at the tip, then move the entire length of the bow over the rosin three to four times. As long as you do not feel any resistance between the bow hairs and the rosin (e.g. on a new bow), you have not yet applied enough rosin.

If you are colophoning the bow hair for the first time, it may take longer for the bow hair to sufficiently supplied with rosin. As long as the bow does not work yet, i.e. does not produce any sound, it must continue to be rosined.

After playing, the top of the instrument should always be wiped with a dry, soft cloth to prevent rosin dust from settling on it. Rosin can attack the varnish of the string instrument and can cause serious damage to the instrument.

### Tuning the strings

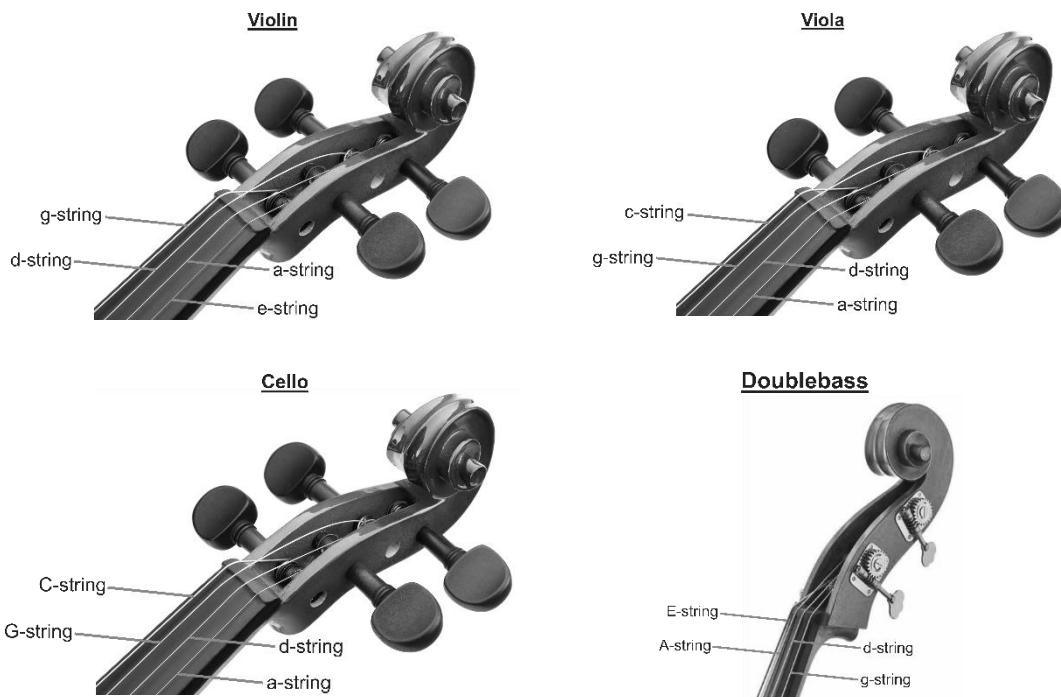
If you put new strings on your stringed instrument or want to play it for the first time, it is sometimes necessary to tune the instrument several times a day. The instrument only becomes relatively stable in tune after a few weeks, i.e. there is no 100% guarantee that the instrument will stay in tune. It is normal to check the tuning before every time you play and correct it if necessary.

The pitch is determined by the tension of the string, i.e. the tighter the string is stretched, the higher the pitch. If the tone is too low, the string must be tightened more by turning the peg. If the note is too high, the string must be loosened. The last movement of the peg for tuning should always be an upward movement, as this keeps the tuning better. Some string instruments also have fine tuners on the tailpiece, which can be used to make the final fine adjustments to the tuning.

Please always proceed with care when tuning, as a string can break if the tension is too high.

The following table provides information about the string tuning of the most common string instruments and other important information.

	<b>Violin</b>	<b>Viola</b>	<b>Violoncello</b>	<b>Double bass</b>
<b>Alternative name</b>	Violin	Viola	Cello, small bass violin	large bass violin
<b>Strings</b>	g - d <sup>1</sup> - a <sup>1</sup> - e <sup>2</sup>	c - g - d <sup>1</sup> - a <sup>1</sup>	C - G - d - a (one octave lower than viola)	E - A - d - g
<b>Tuning</b>	Fifths	Fifths	Fifths	Fourths
<b>Family</b>	Viola da Braccio	Viola da Braccio	Viola da Gamba	Viola da Gamba
<b>Body length</b>	approx. 35-36 cm (4/4)	approx. 39-43 cm (4/4)	approx. 75-77 cm (4/4)	approx. 110 cm (3/4)
<b>Bow length</b>	approx. 75 cm	approx. 75 cm	approx. 70 cm	approx. 68.5 cm



In the course of time, the musician normally learns to tune by ear, for which a reference tone (concert pitch A) is required, e.g. from a tuning fork or another tuned instrument. Once the A string has been tuned by ear, the remaining strings of a violin, viola and cello are tuned in fifths. The strings of a double bass are tuned in fourths.

However, we recommend buying a tuner to get you started with tuning your instrument. This automatically recognizes the note being played, provides information on whether the note is too low or too high and uses arrows or steps to indicate the direction in which the note needs to be tuned. An instruction manual should be included with the respective tuner.

String instruments can be tuned in playing position. Place the switched-on tuner in front of you and check which string belongs to which peg and which fine tuner. First pluck the empty A string and check the tuner display to see whether the pitch is too high or too low. If the pitch is more than a quarter tone off or if the fine tuner is already at the stop, turn the appropriate peg clockwise to tune higher or counterclockwise to tune lower. The peg must always be pressed into the pegbox with some feeling while turning so that it holds properly in the pegbox due to the string tension and the string tension does not slacken. In between, you can strike the empty string to check how the pitch has changed. If the pitch is only a quarter tone off, you can switch from the peg to the fine tuner. Turn the fine tuner on the A string clockwise to tune higher or counterclockwise to tune lower.

In between, pluck the empty string again to check how the pitch has changed. While the string is being tensioned, make sure that there is still enough space between the fine tuner and the top of the instrument. If a fine tuner is already too low, it must be loosened and the corresponding string pre-tuned again using a peg. The fine tuner can then be readjusted again. Once you have tuned the A-string of a violin, you can repeat the above steps for the D-string, G-string and finally the E-string. This can also be applied to other string instruments (starting with the A string and then the remaining strings). Finally, we recommend checking all strings and their tuning again and retuning them with the respective fine tuner.

## Correcting bridge misalignment

When tuning the strings and due to the pulling force while playing, it can happen that the bridge becomes a little crooked, i.e. leans slightly towards the fingerboard. If this won't be corrected, the bridge may warp over time. If you look at the bridge from the side, its flat rear side (i.e. the side facing the tailpiece) should be perpendicular to the basic curvature of the instrument top. Due to the curvature, when the bridge is in the correct position, it looks as if it is tilted slightly backwards towards the tailpiece. If this is not the case, you can realign the inclination of the bridge by applying light pressure from both sides. These steps are also illustrated in the video above.

## Counteract string wear

To make the strings glide better in the notches of the nut and bridge, you can run a pencil along the notches several times. The graphite of the pencil reduces the friction between the notch and the string, acting as a kind of lubricant and thus counteracting the wear of the string at this point.

## Make pegs work

If a peg no longer runs properly (too tight or too loose), it may be that the sliding layer is no longer optimal and the peg must first be lubricated.

To do this, loosen the string tension on the affected peg until you can remove the string from the tailpiece. Then you can also loosen the string at the top of the peg and pull the end of the string out of the peg. The removed peg, or the relevant surface of the peg that is in direct contact with the pegbox, should now be rubbed all over with a dry bar of curd soap (alternatively special peg soap). You can then turn the peg back and forth in the pegbox a few times with light pressure. If necessary, repeat this process several times until the peg runs smoothly in the pegbox.

To prevent the peg from turning back unintentionally due to the string tension or the pulling force, apply a little blackboard chalk (alternatively rosin in powder form) to the surface of the peg that has been treated with curd soap or peg soap. This minimizes the automatic rotation of the peg. However, make sure that only enough chalk is applied so that the peg can still be moved easily in the peg box. Finally, the corresponding string is wound and tuned again.

## WEEE-statement

(Waste of Electrical and Electronic Equipment)

Your product is designed and manufactured using high quality materials and components that are recyclable and reusable. The symbol means that at the end of its life, your product must be disposed of separately from household waste. Dispose of this device at your local collection or recycling point. Please help protect the environment we all live in.

All specifications and appearances are subject to change without notice. All information were correct at the time of printing. Musikhaus Kirstein GmbH does not guarantee the accuracy or completeness of the descriptions, photos or statements contained in this manual. Printed colors and specifications may differ slightly from the product. Musikhaus Kirstein GmbH products are only sold through authorized dealers. Distributors and dealers are not representatives of Musikhaus Kirstein GmbH and are not authorized to legally bind Musikhaus Kirstein GmbH in any way.

This statement only refers to electric string instruments with build-in pickup/equalizer.

 **KIRSTEIN.de**

Musikhaus Kirstein GmbH  
Bernbeurener Str. 11  
D-86956 Schongau  
info@kirstein.de  
+49(0)8861/909494-0

