

Concert Monochord + Koto

MO-46 GK for musicians and performer

Our Concert Monochord combines the heavenly overtone rich tunes of the monochord with the melodic sounds from the Koto and the Tanpura drone.

The following text will give you instructions and tips on how to use and care for your instrument.



designed by *Ingo Böhme*

Basic configuration

28 overtone and 2 bass strings on one side, 12 Kotos strings and 4 Tanpura strings on the other side.
Ash & cherry wood, size 53 x 12 x 4"

Included:

tuning key, tuner, some replacement strings, 12 bridges and a tuning template, 2 feet,
2 short wooden handle screws for the vertical standing position

1 middle wood handle screw and 1 long wood handle screw, 4 disks,

1 short and 1 long metal sleeve for the horizontal position, 1 propeller to move the instrument quickly from the standing to the laying position.

Assembly instructions

The two feet that can either be mounted at the bottom so the instrument can be placed horizontal as shown in the picture to the right. Or the two feet can be mounted at the middle of the bottom and top which allows the instrument to be played horizontal. An other accessory is a third Propeller foot, so you can quickly move the instrument from standing to the laying position.



Vertical standing position

In this position the monochord can be stored space saving. Make sure fastening screw is screwed in tightly to hold the monochord upright and the locking mechanism has clicked in. Use the two short screws with the round wooden handle to mount the feet on both sides of the body of the monochord.

To mount the propeller use the long screw with the round wooden handle. Insert the propeller, than one of the disk, the brass sleeve, another disk and than you can mount the screw at the top of the monochord body.



Make sure the feet are tighten securly .

Horizontal position

For this position you have to remove both feet from the side and attach them to the bottom and the top. (as shown in the picture to the right)

The middle wood handle screw and the short sleeve are for the bottom side (the side with the nails).

Assemble the screw, foot, washer, short sleeve , washer and insert the screw in the center hole at the nail side.

The long wood handle screw and the long sleeve is for the top side of the monochord, the side with the tuning pegs.

Assemble the long wood handle screw, foot, washer, long sleeve, washer for this position.



Make sure the feet are tighten securly .

Recommended tuning c:

The strings can be tuned a full tone higher or lower than the recommended base tone c (b,c,d)
Monochord side:

28 overtone string c

2 braided bass string C

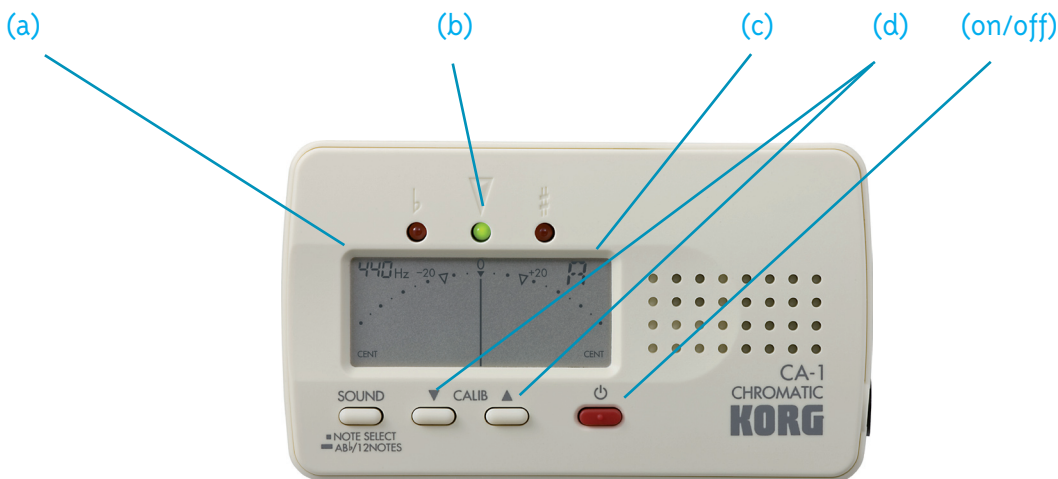
Koto-Tanpura-Strings:

12 Koto strings use the included template and suggested tuning on the template as a starting point.

4 Tanpura strings in C, c, c, G tuning from the inside C to the outside G bass string.

The bridges on the monochord side can be moved up or down to change the string length. The default position for the bridge is approximately 2 3/4" from the end.

The tuner



This compact and easy to use tuner encompasses the whole range of tones from C1 (32,70Hz) to C8 (4186,01Hz).

Our recommendation for the tuning is to set the tuner to 432 or 440 Hz (a).

If the tuner is set on another frequency you can change the frequency by pressing the button (d).

This tuner works best when used in a low noise environment.

This tuner displays the notes like this: C,D,E,F,G,A,B, no matter which octave.

For example c' and c will be displayed as „C“.

The included tuner is designed to be used in a silent environment. If you have to tune in a noisy environment we recommend a clipon tuner (CA-AW3G) or a contact microphone (CA-CM200).

This allows you to tune independent of the noise level around you.

Both are not included and can be purchased through feltone.



We ship the instrument pretuned. But because strings and wood are reacting with temperature you will need to tune the instrument upon arrival and after a couple of retunings it will keep its tuning for long period of time.

Let the instrument rest and acclimate to the new surrounding. After the instrument was unpacked and had rested for a day use the tuning key and the tuner coming with the instrument to tune it.

The tuning process

Please notice that you only need to move the tuning key slightly, one degree at a time to change the note.

For example half a turn of the tuning key will move the tone up several notes and that could even cause the string to break.

The setting for the tuner can be between 440 -432 Hertz (Hz). Use 432 Hz for a natural harmonic tone. If you are playing this instrument together with other kind of traditional instruments use 440 Hz to be compatible. You find more information about this topic in the internet.



First tuning:

This example assumes you are tuning the instrument to C.

Put the tuning key onto the first peg, plug the string and look at the tuner (Which you have turned on and set to 432 or 440Hz).

-> displayed tone is C and the needle is left from the center or displayed tone is even a deeper note (A# / B)

= the tone is too low, **you need to tighten the string**

--> to tune to a higher pitch you have to move the tuner **clockwise** ↻

-> displayed tone is C and the needle right from the center or displayed tone is even a higher note (C# / D)

= the tone is too high, **you need to loosen the string.**

--> to lower the pitch you have to turn the tuner **counterclockwise** ↻

Just relax and listen to the sound and you will get into it quickly.

The string is tuned correctly when the needle of the tuner is in the middle and the green LED (b) is on.

Tip 1: If you didn't meet the tone exactly, loosen the string a little bit and start it again.

Tip 2: Try to match the exact tone with a slow and smooth turn of the tuning key.

Continue to tune the other strings. Because the pegs are on the right and on the left side, it might be easier to tune the pegs on one side, then turn the instrument around and tune the other side.

Second tuning:

We recommend a proper tuning every day for at least two weeks. Don't worry if you don't have time every day, even if you tune every other day it just takes a little bit longer for the instrument to stabilize.

After this period the tone will be stable for a long time and even under changed conditions. Perhaps you think that tuning is a lot of work. But this procedure helps you to connect to the instrument, to hear the right tone, the overtones and other sound phenomena.

If you use sound in pedagogic or therapeutic settings, you can use the event of tuning as a kind of awareness test.

For a clear, overtone rich sound, a proper tuning is very important!

The Tuning process for koto and tanpura

Koto

The Koto part of the Concert monochord is related to the Japanese harp like Koto music instrument.

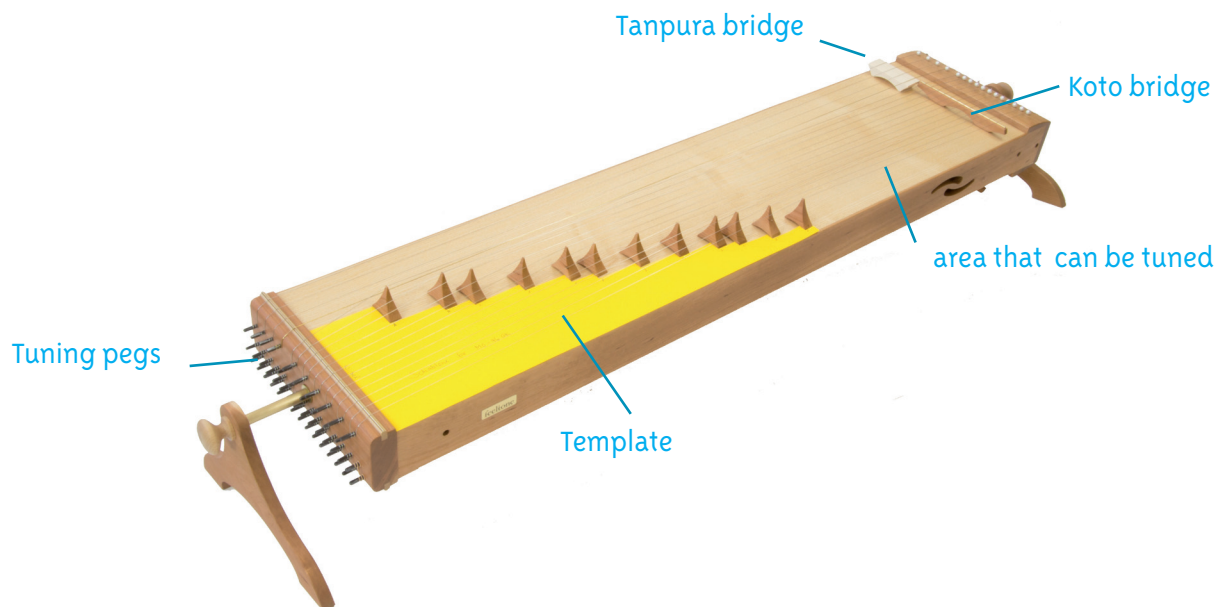
We have included a tuning template that will guide you to tune the Koto part of the instrument into a Japanese tuning scale.

Place the instrument with the tuning pegs facing you and insert the template as shown in the picture. Insert the single string bridges in the spaces marked in the template.

The bridges should slide in easily otherwise loosen the strings a bit till they can be inserted easily.

After that you can tune the strings to the tone marked on the template. Play the string by strumming it and play the part of the string facing the tuning peg side.

After you tuned the Koto side to the suggested tunes you can change the tone by sliding the bridge up or down.



Tanpura

The Tanpura is an East Indian Overtone music instrument.

When you play the strings create the typical snare tone.

If you want to maximize the snare effect you can move the tanpura bridge a little bit to the left or right.

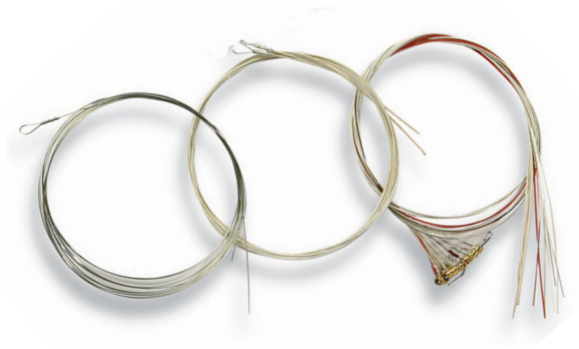
Another thing you can do is to insert a thin string and put the string right under the place where the metal string touches the bridge.

How to replace a broken string

If a string is broken, first remove the string completely. Keep the pearl as you will need it for the replacement string. Look at the other strings of the same type: how often are they twisted around the pegs? **Please turn the peg of the broken string counterclockwise just as often!**

If you don't do this the peg will be pushed deeper and deeper in the wood during the tuning process and either the peg will break or the wood will split.

Now align the peg, so the hole in the peg should point toward the string side.



1.) Take the new string, put it on the nail, insert the pearl and then pull the string through the peg hole on the other side of the instrument.

2.) Take 1/2 inch of the end of the string and bend it down at a 90 degree angle, using your fingers or a small pliers. Then pull the string back so the bent down piece of the string points downwards at the peg. You want the first two windings of the string to go over the bent down piece of string. If this sounds confusing just look at the other pegs which already have strings on them so you see the end result.

3.) Start to turn the tuning key clockwise to slightly tighten the string. Guide the string so that the first two windings of the strings will be over the bent down end of the string the next ones below that.

4.) When there is no more slack but the string is not tight yet you can start the tuning process. **But first make sure the string at the end of the pearl is in the notch of the wood.**

Now you can start the tuning process (see „the tuning process“).

Important only use the original strings as they are custom made to fit the instrument.

Check out our videos on YouTube at the feltone products channel!

Here you will find more information about our instrument, examples how to play them, tuning tips and more.

[www.youtube.com](https://www.youtube.com/channel/UCVsN6xeKSfgwZODzRAMt38g) -> channel enter **Feltone**

or

<https://www.youtube.com/channel/UCVsN6xeKSfgwZODzRAMt38g>

How to play

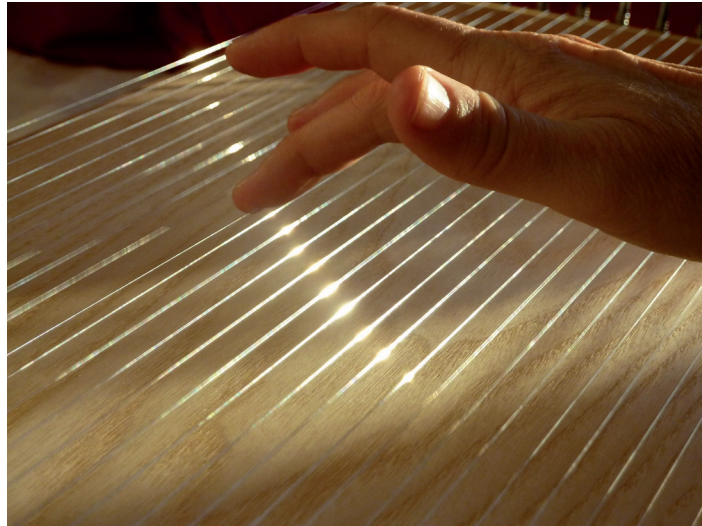
Monochord - creates a relaxing overtone rich sound

Tip If you intend a relaxing effect we recommend to play smooth and steady on the monochord strings to create an even sound wave. Imagine a small, long wave that rolls back and forth on the beach.

a.) Put one finger (middle or ring finger) of the right (or left) hand in the middle of the top string and run it smoothly across all strings towards your body. Before the finger reaches the last string, the finger of the other hand starts at the top string. After a short period bright overtone will appear and resonate with the movement of your fingers.

b.) After you have established the basic tone you can start varying the tone: Try out what happens when you play with the tip or the center part of the finger. While keeping the flowing movement of the fingers you can move one finger to another position of the string and play there and other overtones will appear. Also the strength and speed of your motion changes the sound quality.

c.) To avoid getting blisters on your fingers you can either press more lightly or use a leather plectrum.



Koto - creates a melodic harp like sound

If you have the monochord in front of you with the perls to the right and the tuning pegs to the left.

The left part of the string, the one toward the tuning pegs is played by plucking the strings. You can either use a plectrum or plug the strings with your fingers.

The right part of the string, the part toward the tuning perls is used to vary the tone that is created by plucking the left side of the string. You can either push down on the right side or move the string to sideways to modify the tune.

For another effect you can use a violin bow to play on either sides of the brige.

Tanpura - overtone rich sound, meditative

The typical snare sound with the long lasting drone tone can be used by itself or to accompany the melodical play of the koto part or the monochord part of the instrument.

You can strum the 4 strings of the Tampura strong or gently with the tip of the finger so they start to vibrate. The special designed bridge than allows the strings to develop the snare sound.

Care and warranty instructions

Wood is a natural material that is alive and reacts with the temperature and humidity. Treat the instrument like you would treat a violin, harp or other fine wood string instruments.

All string instruments appreciate an even room temperature to stay in tune. If the air is too hot and dry, the wood can dry out and it can form cracks!

We recommend to keep the **humidity between 50%-60%!!!**

Care Instruction and Tips to create the best environment for your Instrument:

Don't expose the instrument to extreme temperatures, chose a moderate room temperature.

You can use an air humidifier during the heating period in the winter month or if you live in a dry climate.

Plants in the room with the instrument will help to regulate air moisture.

Important: especially if you have floor heating, never set a wood instrument on the floor as this will destroy your instrument by drying out the wood which will result into the wood cracking.

Please note that our warranty is voided, if the instrument was exposed to high temperatures or dry air.

Enjoy your New Instrument!



Feedback

We love to hear back from you about your experiences, suggestions or comments while working with our instruments.

You can email us at: info@felttone.com

Customers from the United States please contact: gabriele@felttoneusa.com