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Original Research Article

(Saz - Baglama Tuning System Method)
Long Neck Baglama Family - For Divan Saz, Tambura and Cura with Abdal Tuning System & Short Neck Baglama Family – Sound Tuning Scheme for Çöğür Saz

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SUMMARY:
The tuning process is the most important problem for those who play instruments and perform the art of music with the saz-baglama. Because every instrument must have a suitable tuning system in order to produce the right sounds. Many saz-baglama students are unable to tune and cannot learn how to tune over time, so they move away from music and even quit playing the saz. In this work, a study that can be useful as a guide for those who are new to playing the saz-baglama, as well as for those who are still playing, students and also musicians, artists, has been carried out and the tuning process has been tried to be expressed in an understandable and practical language.

This article is a "Saz-Bağlama Tuning System Method" explaining the Abdal Tuning System for the Long Neck Bağlama Family - Divan Saz, Tambura and Cura and the Tuning System for the Short Neck Bağlama Family - Çöğür Saz and is based on the experiences of the author of this work, which is a handbook, Asst. Prof. Dr. Emin Taner ELMAS, who has developed his own musical studies over the years and his own unique art of performing the saz-bağlama.

In the work; Long Neck Baglama Family - Divan Sazı, Tambura and Cura for "Abdal Düzeni" Sound Tuning and Short Neck Baglama Family - Çöğür Sazı Sound Tuning are described, the relevant devices and parts used for tuning are shown, musical notes and corresponding letters on the tuner are indicated. Long neck baglama, short neck baglama, cura and divan saz are introduced with photographs. First of all, how to do tuning with tuning whistle, A whistle and ear; both when the strings are free and idle and by pulling the "La" sound to a specified note and tightening the relevant pitch is explained. Then, how to do tuning using a tuner; both when the strings are free and idle and by pulling the "La" sound to a specified note and tightening the relevant pitch is also explained. These methods are expressed separately for both long neck and short neck baglama families. How to set up the tuning for each situation is explained step by step and care has been taken to make it easy to understand.

The notes and related pitches for the "Abdal Düzen" (Bozuk Düzen, Kara Düzen) in the long-neck bağlama family and the notes and related pitches for the "Çöğür Düzen" in the short-neck bağlama family are shown in tables.
For this purpose, the aim of the preparation of the work is to be useful especially for those who have just started playing the saz-baglama, those who still continue to play, students, musicians and artists, as well.

TOPIC – 1: Long Neck Baglama Family – "Abdal Tuning" for Divan Saz, Tambura and Cura:

This tuning system is also called "Long Neck Baglama Tuning System", "Bozuk Düzen" or "Kara Düzen". The tuning sounds of this tuning system are given in Table 1, the musical notes and corresponding letters on the tuner are given in Table 2, and the letters on the tuner and corresponding musical notes are given in Table 3.

For Divan Saz, 0.22 mm or 0.25 mm strings are used in accordance with the boat size.

For Long Neck Tambura saz, 0.20 mm strings are used.

For Cura, 0.15 or 0.16 mm strings are used in accordance with the boat size.

Table 1 Long Neck Baglama Family - Abdal Pattern Sound Tuning Table for Divan Saz, Tambura and Cura.

STRING GROUP		TUNING WHISTLE SOUND
I-	Lower String	La
II-	Medium String	Re
III-	Upper String	Sol

Table 2 Musical notes and corresponding letters on the tuner.

MUSICAL NOTE	TUNING DEVICE LETTER EQUIVALENT
Do	C
Re	D
Mi	E
Fa	F
Sol	G
La	A
Si	B

Table 3 Letters on the tuner and their corresponding musical notes.

TUNING DEVICE LETTERS	CORRESPONDING MUSICAL NOTE
A	La
B	Si
C	Do
D	Re
E	Mi
F	Fa
G	Sol

Tuner Settings:

Tuning Frequency: 440 Hz.

Chromatic Scale

Key C

In order to be able to recognize the devices and instruments discussed within the scope of the work; Figure 1 shows various tuning devices, Figure 2 shows tuning whistle, Figure 3 shows capo types, Figure 4 shows Divan Saz and Short Neck Baglama, Figure 5 shows Tambura Saz - Long Neck Baglama, Figure 6 shows Cura and Saz - Long Neck Baglama, and Figure 7 shows Cura.

DIVAN SAZI (8 STRINGS) TUNING SCHEME:

A- Long Neck Tuning System with the Tuning Whistle and Ear and the Strings Free:
I- Lower String Group:
Step 1: While blowing the sound of "La" on the tuning whistle, the peg of the first thin string in the lower string group is turned freely (without pressing any pitch) and tightened gradually, while the sound is obtained by hitting this string with the plectrum, when the sound of the whistle and the sound of the lower string are equal, the whistle is released, now the lowest string is tuned to the sound of "La".

Step 2: The peg of the second thin string in the middle of the lower string group is turned and gradually tightened, the sound is obtained by striking these two strings simultaneously with the plectrum, and the sound of this string is equalized with the sound of the first string at the bottom, which has just been tuned.

Step 3: The peg of the third string, the thin bam string, above the lower string group is also turned and gradually tightened, and its sound is equalized with the sound of the other two thin strings. At this time, the sound is obtained by striking these three strings simultaneously with the plectrum. After this stage, the lower string group of the bağlama becomes tuned within itself.

II-Middle String Group:
Step 4: While blowing the sound of “Re” on the tuning whistle, the peg of the first string at the bottom of the middle string group is turned and gradually tightened, while the sound is obtained by hitting this string with the plectrum, when the sound on the whistle and the sound of the middle lower string are equal to each other, the whistle is released, the middle lower string is tuned to the sound of “Re”.

Step 5: The peg of the second string at the top of the middle string group is turned and gradually tightened, the sound is obtained by hitting these two strings at the same time with the plectrum, and the sound of this string and the sound of the middle lower first string, which has just been tuned, are equalized to each other. After this stage, the middle string group of the bağlama becomes tuned within itself.

III- Upper String Group:
Step 6: While blowing the sound of “Sol” on the tuning whistle, the peg of the first thin string in the upper string group is turned freely (idle - without pressing any pitch) and tightened gradually, while the sound is obtained by hitting this string with the plectrum, when the sound on the whistle and the sound of the upper group lower string are equal to each other, the whistle is released, now the lower string in the upper group is tuned to the sound of “Sol”.

Step 7: The peg of the second thin string in the middle of the upper string group is turned and gradually tightened, the sound is obtained by striking these two strings simultaneously with the plectrum, and the sound of this string is equalized with the sound of the first string at the bottom of the upper group, which has just been tuned.

Step 8: The peg of the third string, the thick bam string, which is at the top of the upper string group, is also turned and gradually tightened, and its sound is equalized with the sound of the other two thin strings. At this time, the sound is obtained by striking these three strings simultaneously with the plectrum. After this stage, the upper string group of the bağlama becomes tuned within itself.

Step 9: By simultaneously hitting the lower string group, middle string group and upper string group with a plectrum, the sound is taken to check that the bağlama is fully tuned. The sound is taken by pressing the "Re" pitch on the lower string group and the tuning control is confirmed by choking the long-neck bağlama setup for the "La" note.

Note: If more than one person will be playing the instrument at the same time, after the first instrument is tuned as above, the lower string “La” sound of the other instrument or instruments should be taken from the instrument that was tuned first.

B- Long Neck Tuning system made by tightening the relevant pitch by pulling the “La” sound to a specified note with the Tuning Whistle and Ear:
I- Lower String Group:
Step 1: The relevant pitch is tightened with the capo and while blowing the sound of "La" on the tuning whistle, the peg of the first thin string at the bottom of the lower string group is turned and tightened gradually, while the sound is obtained by hitting this string with the plectrum, when the sound on the whistle and the sound of the lower string are equal, the whistle is released, now the lowest string is tuned to the relevant pitch we want and to the sound of "La".

Step 2: The peg of the second thin string in the middle of the lower string group is turned and gradually tightened, the sound is obtained by striking these two strings simultaneously with the plectrum, and the sound of this string is equalized with the sound of the first string at the bottom, which has just been tuned.

Step 3: The peg of the third string, the thin bam string, above the lower string group is also turned and gradually tightened, and its sound is equalized with the sound of the other two thin strings. At this time, the sound is obtained by striking these three strings simultaneously with the plectrum. After this stage, the lower string group of the bağlama becomes tuned within itself.

II-Middle String Group:
Step 4: The peg of the first string at the bottom of the middle string group is turned and gradually tightened, while the sound is obtained by striking this string and all the strings in the lower string group with the plectrum at the same time, and when the sound of the lower string group and the sound of the lower string in the middle are equalized, the tuning is achieved.

Step 5: The peg of the second string at the top of the middle string group is turned and gradually tightened, the sound is obtained by striking these two strings with the plectrum at the same time, and the sound of this string and the sound of the first lower string in the middle, which has just been tuned, are equalized. After this stage, the middle string group of the bağlama becomes tuned within itself.

III- Upper String Group:
Step 6: The peg of the first thin string at the bottom of the upper string group is turned and gradually tightened, while the sound is obtained by hitting this string and all the strings in the middle string group with the plectrum at the same time, and when the sound of the middle string group and the sound of the lowest string at the top are equal to each other, the tuning is achieved.

Step 7: The peg of the second thin string in the middle of the upper string group is turned and gradually tightened, the sound is obtained by hitting these two strings at the same time with the plectrum, and the sound of this string and the sound of the first string at the bottom of the upper group, which has just been tuned, are equalized to each other.

Step 8: The peg of the third string at the top of the upper string group, the thick bam string, is also turned and gradually tightened, and its sound is equalized to the sound of the other two thin strings. At this time, the sound is obtained by hitting these three strings at the same time with the plectrum. After this stage, the upper string group of the bağlama becomes tuned within itself.

Step 9: By hitting the lower string group, middle string group and upper string group with a plectrum at the same time, the sound is taken and the baglama is checked to make sure it is tuned properly. The sound is taken by pressing the "Re" pitch on the lower string group and the tuning is confirmed to give harmony by choking the long-neck baglama arrangement for the "La" note.

Note: If more than one person will be playing the instrument at the same time, after the first instrument is tuned as above, the lower string “La” sound of the other instrument or instruments should be taken from the instrument that was tuned first.

C- Long Neck Tuning System with the Tuner and the Strings Free:
I- Lower String Group:
Step 1: Turn on the tuner. Tuning Frequency: 440 Hz. Chromatic Scale and Key C settings should be visible on the device. The peg of the first thin string at the bottom of the lower string group is turned freely (idle-without pressing any pitch) and gradually tightened, while the sound is obtained by hitting this string with the plectrum, when the tuner shows the letter "A", the lowest string is now tuned to the sound of "La".

Step 2: The same process described in Step 1 can be repeated for the second thin string in the middle of the lower string group. Or, as another method; The peg of the second thin string in the middle of the lower string group is turned and gradually tightened, the sound is obtained by striking these two strings simultaneously with the plectrum, and the sound of this string is equalized with the sound of the first string at the bottom, which has just been tuned.

Step 3: What was done in Step 1 or Step 2 can be repeated for the thin bam string, which is the third string above the lower string group. Or, the peg of the thin bam string, which is the third string above the lower string group, is also turned and gradually tightened, and its sound is equalized with the sound of the other two thin strings. At this time, the sound is obtained by striking these three strings simultaneously with the plectrum. After this stage, the lower string group of the bağlama becomes tuned within itself.

II-Orta Tel Grubu:
Step 4: By pressing the “Re” pitch in the lower string group, the sound is taken from the saz with a plectrum and the letter that lights up on the tuner is observed. (The letter D should light up, which corresponds to the “Re” sound). The peg of the first string at the bottom of the middle string group is turned and gradually tightened, while the sound is taken by hitting this string with the plectrum. When the letter that was just read from the tuner is seen, the sound of the lower string group and the sound of the middle lower string in the middle are equalized and tuning is achieved.

Step 5: Repeat what was done in Step 4 for the second upper string of the middle string group. Or, the peg of the second upper string of the middle string group is turned and gradually tightened, the sound is obtained by hitting these two strings with the plectrum at the same time, and the sound of this string is equalized to the sound of the first lower middle string that has just been tuned. After this stage, the middle string group of the bağlama becomes tuned within itself.

III- Upper String Group:
Step 6: In the middle string group, the sound is taken from the saz with a plectrum by pressing the Re pitch (the middle string group will be pressed) and the letter that lights up on the tuner is observed. (The letter G should light up, which corresponds to the “Sol” sound). The peg of the first string below in the upper string group is turned and gradually tightened, while the sound is taken by hitting this string with the plectrum. When the letter that was just read from the tuner is seen, the sound of the middle string group and the sound of the lowest string in the upper group are equalized and tuning is achieved.

Step 7: The same process described in Step 6 can be repeated for the middle second thin string of the upper string group. Or, as another method; The peg of the middle second thin string of the upper string group is turned and gradually tightened, the sound is obtained by hitting these two strings simultaneously with the plectrum, and the sound of this string is equalized with the sound of the first string at the bottom of the upper group, which has just been tuned.

Step 8: The same process described in Steps 6 and 7 can be repeated for the top thick bam string of the upper string group. Or, as another method; The peg of the third string at the top of the upper string group, the thick bam string, is also turned and gradually tightened, and its sound is equalized with the sound of the other two thin strings. At this time, the sound is obtained by hitting these three strings simultaneously with the plectrum. After this stage, the upper string group of the bağlama becomes tuned within itself.

Step 9: By hitting the lower string group, middle string group and upper string group with a plectrum at the same time, the sound is taken and the baglama is checked to make sure it is tuned properly. The sound is taken by pressing the "Re" pitch on the lower string group and the tuning is confirmed to give harmony by choking the long-neck baglama arrangement for the "La" note.

Note: If more than one person will be playing the instrument at the same time, after the first instrument is tuned as above, the lower string A sound of the other instrument or instruments should be taken from the instrument that was tuned first.

D- Long Neck Tuning System by tightening the relevant pitch with the Tuner and by pulling the “La” sound to a specified note:
I- Lower String Group:
Step 1: The tuner is turned on. Tuning Frequency: 440 Hz. Chromatic Scale and Key C settings should be visible on the device. The relevant pitch is tightened with the capo. The peg of the first thin string at the bottom of the lower string group is turned and gradually tightened, while the sound is obtained by hitting this string with the plectrum, when the tuner shows the letter “A”, the lowest string is now tuned to the sound of “La” pulled to the relevant pitch.

Step 2: The same process described in Step 1 can be repeated for the second thin string in the middle of the lower string group. Or, as another method; The peg of the second thin string in the middle of the lower string group is turned and gradually tightened, the sound is obtained by striking these two strings simultaneously with the plectrum, and the sound of this string is equalized with the sound of the first string at the bottom, which has just been tuned.

Step 3: What was done in Step 1 or Step 2 can be repeated for the thin bam string, which is the third string above the lower string group. Or, the peg of the thin bam string, which is the third string above the lower string group, is also turned and gradually tightened, and its sound is equalized with the sound of the other two thin strings. At this time, the sound is obtained by striking these three strings simultaneously with the plectrum. After this stage, the lower string group of the bağlama becomes tuned within itself.

II-Middle String Group:
Step 4: In the lower string group, the sound is taken from the saz with a plectrum by pressing the “Re” pitch and observing which letter is lit on the tuner. The peg of the first string at the bottom of the middle string group is turned and gradually tightened, while the sound is taken by hitting this string with the plectrum. When the letter just read from the tuner is seen, the sound of the lower string group and the sound of the middle lower string in the middle are equalized and tuning is achieved.

Step 5: Repeat what was done in Step 4 for the second upper string of the middle string group. Or, the peg of the second upper string of the middle string group is turned and gradually tightened, the sound is obtained by hitting these two strings with the plectrum at the same time, and the sound of this string is equalized to the sound of the first lower middle string that has just been tuned. After this stage, the middle string group of the bağlama becomes tuned within itself.

III- Upper String Group:
Step 6: In the middle string group, the sound is taken from the instrument with a plectrum by pressing the “Re” pitch (to be pressed on the middle string group) and the letter that lights up on the tuner is observed. The peg of the first string below in the upper string group is turned and gradually tightened, while the sound is taken by hitting this string with the plectrum. When the letter that was just read from the tuner is seen, the sound of the middle string group and the sound of the lowest string in the upper group are equalized and tuning is achieved.

Step 7: The same process described in Step 6 can be repeated for the middle second thin string of the upper string group. Or, as another method; The peg of the middle second thin string of the upper string group is turned and gradually tightened, the sound is obtained by hitting these two strings simultaneously with the plectrum, and the sound of this string is equalized with the sound of the first string at the bottom of the upper group, which has just been tuned.

Step 8: The same process described in Steps 6 and 7 can be repeated for the top thick bam string of the upper string group. Or, as another method; The peg of the third string at the top of the upper string group, the thick bam string, is also turned and gradually tightened, and its sound is equalized with the sound of the other two thin strings. At this time, the sound is obtained by hitting these three strings simultaneously with the plectrum. After this stage, the upper string group of the bağlama becomes tuned within itself.

Step 9: By hitting the lower string group, middle string group and upper string group with a plectrum at the same time, the sound is taken and the baglama is checked to make sure it is tuned properly. The sound is taken by pressing the "Re" pitch on the lower string group and the tuning is confirmed to give harmony by choking the long-neck baglama arrangement for the "La" note.

Note: If more than one person will be playing the instrument at the same time, after the first instrument is tuned as above, the lower string “La” sound of the other instrument or instruments should be taken from the instrument that was tuned first.

LONG NECK BAGLAMA – TAMBURA SAZI (7 STRINGS) TUNING SCHEME:

A- Long Neck Tuning System with the Tuning Whistle and Ear and the Strings Free:

I- Lower String Group:

Step 1: While blowing the sound of “La” on the tuning whistle, the peg of the first thin string at the bottom of the lower string group is turned and gradually tightened, while the sound is obtained by hitting this string with a plectrum, when the sound of the whistle and the sound of the lower string are equal to each other, the whistle is released, the lowest string is now tuned to the sound of “La”.

Step 2: The peg of the second thin string in the middle of the lower string group is turned and gradually tightened, the sound is obtained by hitting these two strings with the plectrum at the same time, and the sound of this string is equalized with the sound of the first lowest string that has just been tuned.

Step 3: The peg of the third string, the thin bam string, above the lower string group is also turned and gradually tightened, and its sound is equalized with the sound of the other two thin strings. Meanwhile, the sound is obtained by hitting these three strings with the plectrum at the same time. After this stage, the lower string group of the baglama becomes tuned within itself.

II-Middle String Group:

Step 4: While blowing the sound of “Re” on the tuning whistle, the peg of the first string at the bottom of the middle string group is turned freely (idle-without pressing any pitch) and gradually tightened, while the sound is obtained by hitting this string with a plectrum, when the sound on the whistle and the sound of the middle lower string are equal to each other, the whistle is released, the middle lower string is tuned to the sound of “Re”.

Step 5: The peg of the second string at the top of the middle string group is turned and gradually tightened, the sound is obtained by hitting these two strings with a plectrum at the same time, and the sound of this string and the sound of the middle lower first string, which has just been tuned, are equalized to each other. After this stage, the middle string group of the bağlama becomes tuned within itself.

III- Upper String Group:

Step 6: While blowing the sound of “Sol” on the tuning whistle, the peg of the first thin string at the bottom of the upper string group is turned freely (idle-without pressing any pitch) and gradually tightened, while the sound is obtained by hitting this string with a plectrum, when the sound on the whistle and the sound of the lower string of the upper group are equal to each other, the whistle is released, now the lower string of the upper group is tuned to the sound of “Sol”.

Step 7: The peg of the thick bam string, which is the third string at the top of the upper string group, is also turned and gradually tightened, and its sound is equalized to the sound of the other thin string. At this time, the sound is obtained by hitting these two strings with the plectrum at the same time. After this stage, the upper string group of the bağlama becomes tuned within itself.

Step 8: By simultaneously hitting the lower string group, middle string group and upper string group with a plectrum, the sound is taken and the tuning of the bağlama is checked. The sound is taken by pressing the “Re” pitch on the lower string group and the tuning control is confirmed by performing the choking operation on the long-neck bağlama arrangement for the “La” note.

Note: If more than one person will be playing the instrument at the same time, after the first instrument is tuned as above, the lower string “La” sound of the other instrument or instruments should be taken from the instrument that was tuned first.

B- Long Neck Tuning system made by tightening the relevant pitch by pulling the “La” sound to a specified note with the Tuning Whistle and Ear:
I- Lower String Group:

Step 1: The pitch related to the capo is tightened and while blowing the sound of “La” on the tuning whistle, the peg of the first thin string at the bottom of the lower string group is turned and tightened gradually, while the sound is obtained by hitting this string with the plectrum, when the sound on the whistle and the sound of the lower string are equal to each other, the whistle is released, now the lowest string is tuned to the sound of “La”, pulled to the relevant pitch we want.

Step 2: The peg of the second thin string in the middle of the lower string group is turned and tightened gradually, the sound is obtained by hitting these two strings with the plectrum at the same time, and the sound of this string is equalized with the sound of the first lowest string, which has just been tuned.

Step 3: The peg of the third string, the thin bam string, located above the lower string group is also turned and tightened gradually, and its sound is equalized with the sound of the other two thin strings. Meanwhile, the sound is obtained by hitting these three strings with the plectrum at the same time. After this stage, the lower string group of the baglama becomes tuned within itself.

II-Middle String Group:
Step 4: The peg of the first string at the bottom of the middle string group is turned and gradually tightened, while the sound is obtained by striking this string and all the strings in the lower string group with the plectrum at the same time, and when the sound of the lower string group and the sound of the lower string in the middle are equalized, the tuning is achieved.

Step 5: The peg of the second string at the top of the middle string group is turned and gradually tightened, the sound is obtained by striking these two strings with the plectrum at the same time, and the sound of this string and the sound of the first lower string in the middle, which has just been tuned, are equalized. After this stage, the middle string group of the bağlama becomes tuned within itself.

III- Upper String Group:
Step 6: The peg of the first thin string at the bottom of the upper string group is turned and gradually tightened, while the sound is obtained by hitting this string and all the strings in the middle string group with a plectrum at the same time, and when the sound of the middle string group and the sound of the lowest string on top are equal to each other, the tuning is achieved.

Step 7: The peg of the thick bam string at the top of the upper string group is also turned and gradually tightened, and its sound is equalized to the sound of the other thin string. At this time, the sound is obtained by hitting these two strings with a plectrum at the same time. After this stage, the upper string group of the bağlama becomes tuned within itself.

Step 8: The sound is obtained by hitting the lower string group, middle string group and upper string group with a plectrum at the same time, and it is checked that the bağlama is fully tuned. The sound is obtained by pressing the “Re” pitch in the lower string group, and the tuning control is confirmed in a way that will provide harmony by choking the long-neck bağlama arrangement for the note “La”.

Note: If more than one person will be playing the instrument at the same time, after the first instrument is tuned as above, the lower string “La” sound of the other instrument or instruments should be taken from the instrument that was tuned first.

C- Long Neck Tuning System with the Tuner and the Strings Free:
I- Lower String Group:
Step 1: Turn on the tuner. Tuning Frequency: 440 Hz. Chromatic Scale and Key C settings should be visible on the device. The peg of the first thin string at the bottom of the lower string group is turned freely (idle-without pressing any pitch) and gradually tightened, while the sound is obtained by hitting this string with the plectrum, when the tuner shows the letter "A", the lowest string is now tuned to the sound of "La".

Step 2: The same process described in Step 1 can be repeated for the second thin string in the middle of the lower string group. Or, as another method; The peg of the second thin string in the middle of the lower string group is turned and gradually tightened, the sound is obtained by striking these two strings simultaneously with the plectrum, and the sound of this string is equalized with the sound of the first string at the bottom, which has just been tuned. Step 3: What was done in Step 1 or Step 2 can be repeated for the thin bam string, which is the third string above the lower string group. Or, the peg of the thin bam string, which is the third string above the lower string group, is also turned and gradually tightened, and its sound is equalized with the sound of the other two thin strings. At this time, the sound is obtained by striking these three strings simultaneously with the plectrum. After this stage, the lower string group of the bağlama becomes tuned within itself.

II-Middle String Group:
Step 4: In the lower string group, the sound is taken from the saz with a plectrum by pressing the “Re” pitch and it is observed which letter is lit on the tuning device. (The letter D should be lit, this corresponds to the “Re” sound). The peg of the first string at the bottom of the middle string group is turned and gradually tightened, while the sound is taken by hitting this string with the plectrum. When the letter just read from the tuning device is seen, the sound of the lower string group and the sound of the middle lower string in the middle are equalized and tuning is achieved.

Step 5: What was done in Step 4 is repeated for the upper second string of the middle string group. Or the peg of the upper second string of the middle string group is turned and gradually tightened, the sound is taken by hitting these two strings at the same time with the plectrum and the sound of this string and the sound of the middle lower first string that was just tuned are equalized. After this stage, the middle string group of the bağlama becomes tuned within itself.

III- Upper String Group:
Step 6: In the middle string group, the sound is taken from the saz with a plectrum by pressing the “Re” pitch (to be pressed on the middle string group) and it is observed which letter is lit on the tuning device. (The letter G should be lit, this corresponds to the “Sol” sound). The peg of the first string at the bottom of the upper string group is turned and gradually tightened, while the sound is obtained by hitting this string with the plectrum. When the letter just read from the tuning device is seen, the sound of the middle string group and the sound of the lowest string in the upper group are equalized and tuning is achieved.

Step 7: The same process explained in Step 6 can be repeated for the top thick bam string of the upper string group. Or as another method; The peg of the thick bam string at the top of the upper string group is also turned and gradually tightened to equalize its sound with the sound of the other thin string. In the meantime, the sound is obtained by hitting these two strings with the plectrum at the same time. After this stage, the upper string group of the baglama becomes tuned within itself.

Step 8: By simultaneously hitting the lower string group, middle string group and upper string group with a plectrum, the sound is taken and the baglama is checked to see if it is fully tuned. The sound is taken by pressing the “Re” pitch on the lower string group and the “La” note is checked by choking on the long-neck baglama setup to ensure harmony.

Note: If more than one person will be playing the instrument at the same time, after the first instrument is tuned as above, the lower string “La” sound of the other instrument or instruments should be taken from the instrument that was tuned first.

D- Long Neck Tuning System by tightening the relevant pitch with the Tuner and by pulling the “La” sound to a specified note:
I- Lower String Group:
Step 1: The tuner is turned on. Tuning Frequency: 440 Hz. Chromatic Scale and Key C settings should be visible on the device. The relevant pitch is tightened with the capo. The peg of the first thin string at the bottom of the lower string group is turned and gradually tightened, while the sound is obtained by hitting this string with the plectrum, when the tuner shows the letter “A”, the lowest string is now tuned to the sound of “La” pulled to the relevant pitch.

Step 2: The same process described in Step 1 can be repeated for the second thin string in the middle of the lower string group. Or, as another method; The peg of the second thin string in the middle of the lower string group is turned and gradually tightened, the sound is obtained by striking these two strings simultaneously with the plectrum, and the sound of this string is equalized with the sound of the first string at the bottom, which has just been tuned.

Step 3: What was done in Step 1 or Step 2 can be repeated for the thin bam string, which is the third string above the lower string group. Or, the peg of the thin bam string, which is the third string above the lower string group, is also turned and gradually tightened, and its sound is equalized with the sound of the other two thin strings. At this time, the sound is obtained by striking these three strings simultaneously with the plectrum. After this stage, the lower string group of the bağlama becomes tuned within itself.

II-Middle String Group:
Step 4: In the lower string group, the sound is taken from the saz with a plectrum by pressing the “Re” pitch and it is observed which letter is lit on the tuning device. The peg of the first string at the bottom of the middle string group is turned and gradually tightened, while the sound is taken by hitting this string with the plectrum. When the letter just read from the tuning device is seen, the sound of the lower string group and the sound of the middle lower string in the middle are equalized and tuning is achieved.

Step 5: What was done in Step 4 is repeated for the second string at the top of the middle string group. Or the peg of the second string at the top of the middle string group is turned and gradually tightened, the sound is taken by hitting these two strings at the same time with the plectrum and the sound of this string and the sound of the middle lower first string that was just tuned are equalized. After this stage, the middle string group of the bağlama becomes tuned within itself.

III- Upper String Group:
Step 6: In the middle string group, the sound is taken from the saz with a plectrum by pressing the “Re” pitch (to be pressed on the middle string group) and the letter that lights up on the tuning device is observed. The peg of the first string at the bottom of the upper string group is turned and gradually tightened, while the sound is taken by hitting this string with the plectrum. When the letter just read from the tuning device is seen, the sound of the middle string group and the sound of the lowest string in the upper group are equalized and tuning is achieved.

Step 7: The same process explained in Step 6 can be repeated for the top thick bam string of the upper string group. Or as another method; The peg of the thick bam string, which is the third string at the top of the upper string group, is also turned and gradually tightened to equalize its sound to the sound of the other thin string. At this time, the sound is taken by hitting these two strings with the plectrum at the same time. After this stage, the upper string group of the bağlama becomes tuned within itself.

Step 8: By simultaneously hitting the lower string group, middle string group and upper string group with a plectrum, the sound is taken and the baglama is checked to see if it is fully tuned. The sound is taken by pressing the “Re” pitch on the lower string group and the tuning control is confirmed to provide harmony by performing the choking operation on the long-neck baglama arrangement for the “La” note.

Note: If more than one person will be playing the instrument at the same time, after the first instrument is tuned as above, the lower string “La” sound of the other instrument or instruments should be taken from the instrument that was tuned first.

CURA (LONG NECK AND 6 STRING) TUNING SCHEME:

A- Long Neck Tuning System with the Tuning Whistle and Ear and the Strings Free:
I- Lower String Group:
Step 1: While blowing the sound of “La” on the tuning whistle, the peg of the first thin string at the bottom of the lower string group is turned and gradually tightened, while the sound is taken by hitting this string with the plectrum, when the sound of the whistle and the sound of the lower string are equal to each other, the whistle is released, now the lowest string is tuned to the sound of “La”.

Step 2: The peg of the second thin string of the lower string group is turned and gradually tightened, the sound is taken by hitting these two strings at the same time with the plectrum, and the sound of this string and the sound of the first lowest string that has just been tuned are equal to each other.

II-Middle String Group:
Step 3: While blowing the sound of “Re” on the tuning whistle, the peg of the first string at the bottom of the middle string group is turned and tightened gradually, while the sound is obtained by hitting this string with a plectrum, when the sound of the whistle and the sound of the middle lower string are equal to each other, the whistle is released, the middle lower string is tuned to the sound of “Re”.

Step 4: The peg of the second string at the top of the middle string group is turned and tightened gradually, the sound is obtained by hitting these two strings with a plectrum at the same time, and the sound of this string and the sound of the middle lower first string, which has just been tuned, are equalized to each other. After this stage, the middle string group of the bağlama becomes tuned within itself.

III- Upper String Group:
Step 5: While blowing the sound of “Sol” on the tuning whistle, the peg of the first thin string at the bottom of the upper string group is turned freely (idle-without pressing any pitch) and tightened gradually, while the sound is obtained by hitting this string with a plectrum, when the sound on the whistle and the sound of the lower string of the upper group are equal to each other, the whistle is released, now the lower string of the upper group is tuned to the sound of “Sol”.

Step 6: The peg of the bam string at the top of the upper string group is also turned and tightened gradually, and its sound is equalized to the sound of the other thin string. At this time, the sound is obtained by hitting these two strings with the plectrum at the same time. After this stage, the upper string group of the bağlama is tuned within itself.

Step 7: By hitting the lower string group, middle string group and upper string group with the plectrum at the same time, the sound is obtained and it is checked that the bağlama is fully tuned. The sound is obtained by pressing the "Re" pitch in the lower string group and the tuning control is confirmed by performing the choking operation on the long-neck baglama arrangement for the "La" note.

Note: If more than one person will be playing the instrument at the same time, after the first instrument is tuned as above, the lower string “La” sound of the other instrument or instruments should be taken from the instrument that was tuned first.

B- Long Neck Tuning system made by tightening the relevant pitch by pulling the “La” sound to a specified note with the Tuning Whistle and Ear:

I- Lower String Group:
Step 1: The pitch related to the capo is tightened and while blowing the sound of “La” on the tuning whistle, the peg of the first thin string at the bottom of the lower string group is turned and tightened gradually, while the sound is obtained by hitting this string with the plectrum, when the sound on the whistle and the sound of the lower string are equal to each other, the whistle is released, now the lowest string is tuned to the sound of “La” pulled to the relevant pitch we want.

Step 2: The peg of the second thin string of the lower string group is turned and tightened gradually, the sound is obtained by hitting these two strings with the plectrum at the same time, and the sound of this string and the sound of the first lowest string that has just been tuned are equal to each other.

II-Middle String Group:
Step 3: The peg of the first string at the bottom of the middle string group is turned and gradually tightened, while the sound is taken by hitting this string and all the strings in the lower string group simultaneously with the plectrum, and when the sound of the lower string group and the sound of the lower string in the middle are equal to each other, the tuning is achieved.

Step 4: The peg of the second string at the top of the middle string group is turned and gradually tightened, the sound is taken by hitting these two strings at the same time with the plectrum, and the sound of this string and the sound of the first string in the middle, which has just been tuned, are equal to each other. After this stage, the middle string group of the bağlama becomes tuned within itself.

III- Upper String Group:
Step 5: The peg of the first thin string at the bottom of the upper string group is turned and gradually tightened, while the sound is taken by hitting this string and all the strings in the middle, which has just been tuned, when the sound of the middle string group and the sound of the lowest string on the top are equal to each other, the tuning is achieved.

Step 6: The top of the upper string group, the bam string, is gradually tightened by turning its peg, and its sound is equalized to the sound of the other thin string. At this time, the sound is obtained by hitting these two strings simultaneously with the plectrum. After this stage, the upper string group of the bağlama becomes tuned within itself.

Step 7: By simultaneously hitting the lower string group, middle string group and upper string group with a plectrum, the sound is taken and the baglama is checked to see if it is fully tuned. The sound is taken by pressing the "Re" pitch on the lower string group and the tuning control is confirmed to provide harmony by performing the choking operation on the long-neck baglama arrangement for the "La" note.

Note: If more than one person will be playing the instrument at the same time, after the first instrument is tuned as above, the lower string “La” sound of the other instrument or instruments should be taken from the instrument that was tuned first.

C- Long Neck Tuning System with the Tuner and the Strings Free:
I- Lower String Group:
Step 1: Turn on the tuner. Tuning Frequency: 440 Hz. Chromatic Scale and Key C settings should be visible on the device. The peg of the first thin string at the bottom of the lower string group is turned and gradually tightened while the sound is obtained by hitting this string with a plectrum, when the tuner shows the letter “A” the lowest string is now tuned to the sound of “La”.

Step 2: The same process explained in Step 1 can be repeated for the second thin string of the lower string group. Or as another method; The peg of the second thin string in the middle of the lower string group is turned and gradually tightened, the sound is obtained by hitting these two strings with a plectrum at the same time, and the sound of this string and the sound of the first lowest string that has just been tuned are equalized.

II-Middle String Group:
Step 3: In the lower string group, the sound is taken from the saz with a plectrum by pressing the “Re” pitch and it is observed which letter is lit on the tuning device. (The letter D should be lit, which corresponds to the “Re” sound). The peg of the first string at the bottom of the middle string group is turned and gradually tightened, while the sound is taken by hitting this string with the plectrum. When the letter just read from the tuning device is seen, the sound of the lower string group and the sound of the middle lower string in the middle are equalized and tuning is achieved.

Step 4: What was done in Step 3 is repeated for the upper second string of the middle string group. Or the peg of the upper second string of the middle string group is turned and gradually tightened, the sound is taken by hitting these two strings with the plectrum at the same time and the sound of this string and the sound of the middle lower first string that was just tuned are equalized. After this stage, the middle string group of the bağlama becomes tuned within itself.

III- Upper String Group:
Step 5: In the middle string group, the sound is taken from the saz with a plectrum by pressing the “Re” pitch (the middle string group will be pressed) and the letter that lights up on the tuning device is observed. (The letter G should light up, which corresponds to the “Sol” sound). The peg of the first string at the bottom of the upper string group is turned and

gradually tightened, while the sound is taken by hitting this string with the plectrum. When the letter just read from the tuning device is seen, the sound of the middle string group and the sound of the lowest string in the upper group are equalized and tuning is achieved.

Step 6: The same process explained in Step 5 can be repeated for the topmost bam string of the upper string group. Or as another method; The peg of the thick bam string at the top of the upper string group is also turned and gradually tightened, and its sound is equalized to the sound of the other thin string. At this time, the sound is taken by hitting these two strings with the plectrum at the same time. After this stage, the upper string group of the bağlama becomes tuned within itself.

Step 7: By simultaneously hitting the lower string group, middle string group and upper string group with a plectrum, the sound is taken and the baglama is checked to see if it is fully tuned. The sound is taken by pressing the "Re" pitch on the lower string group and the tuning control is confirmed to provide harmony by performing the choking operation on the long-neck baglama arrangement for the "La" note.

Note: If more than one person will be playing the instrument at the same time, after the first instrument is tuned as above, the lower string "La" sound of the other instrument or instruments should be taken from the instrument that was tuned first.

D- Long Neck Tuning System by tightening the relevant pitch with the Tuner and by pulling the "La" sound to a specified note:
I- Lower String Group:
Step 1: The tuner is turned on. Tuning Frequency: 440 Hz. Chromatic Scale and Key C settings should be visible on the device. The relevant pitch is tightened with the capo. The peg of the first thin string at the bottom of the lower string group is turned and gradually tightened, while the sound is obtained by hitting this string with the plectrum, when the tuner shows the letter "A", the lowest string is now tuned to the relevant pitch and tuned to the sound of "La".

Step 2: The same process explained in Step 1 can be repeated for the second thin string of the lower string group. Or as another method; The peg of the second thin string in the middle of the lower string group is turned and gradually tightened, the sound is obtained by hitting these two strings with the plectrum at the same time, and the sound of this string and the sound of the first lowest string that has just been tuned are equalized.

II-Middle String Group:
Step 3: In the lower string group, the sound is taken from the saz with a plectrum by pressing the "Re" pitch and it is observed which letter is lit on the tuning device. The peg of the first string at the bottom of the middle string group is turned and gradually tightened, while the sound is taken by hitting this string with the plectrum. When the letter just read from the tuning device is seen, the sound of the lower string group and the sound of the middle lower string in the middle are equalized and tuning is achieved.

Step 4: What was done in Step 3 is repeated for the second string at the top of the middle string group. Or the peg of the second string at the top of the middle string group is turned and gradually tightened, the sound is taken by hitting these two strings at the same time with the plectrum and the sound of this string and the sound of the middle lower first string that was just tuned are equalized. After this stage, the middle string group of the bağlama becomes tuned within itself.

III- Upper String Group:
Step 5: In the middle string group, the sound is taken from the saz with a plectrum by pressing the "Re" pitch (to be pressed on the middle string group) and the letter that lights up on the tuning device is observed. The peg of the first string at the bottom of the upper string group is turned and gradually tightened, while the sound is taken by hitting this string with the plectrum. When the letter just read from the tuning device is seen, the sound of the middle string group and the sound of the lowest string in the upper group are equalized and tuning is achieved.

Step 6: The same process explained in Step 5 can be repeated for the topmost bam string of the upper string group. Or as another method; The peg of the thick bam string, which is the third string at the top of the upper string group, is also turned and gradually tightened to equalize its sound to the sound of the other thin string. At this time, the sound is taken by hitting these two strings with the plectrum at the same time. After this stage, the upper string group of the bağlama becomes tuned within itself.

Step 7: By simultaneously hitting the lower string group, middle string group and upper string group with a plectrum, the sound is taken and the baglama is checked to see if it is fully tuned. The sound is taken by pressing the "Re" pitch on the lower string group and the "La" note is checked by choking on the long-neck baglama setup to ensure harmony.

Note: If more than one person will be playing the instrument at the same time, after the first instrument is tuned as above, the lower string "La" sound of the other instrument or instruments should be taken from the instrument that was tuned first.
The notes and related pitches for the "Abdal Tuning System" - "Abdal Düzen" (Bozuk Düzen, Kara Düzen) in the Long Neck Bağlama family are shown in Table 4.

Upper String Group	Middle String Group	Lower String Group	Pitch No
Do	Sol	Re	23
Si	Fa #	Do #	22
Si^{b}	Fa	Do	21
La	Mi	Si	20
La b2	Mi b2	Si^{b} 2	19
La b	Mi b	Si^{b}	18
Sol	Re	La	17
Fa #	Do #	La b2	16
Fa #3	Do #3	La b	15
Fa	Do	Sol	14
Mi	Si	Fa #	13
Mi b2	Si^{b} 2	Fa #3	12
Mi b	Si^{b}	Fa	11
Re	La	Mi	10
Do #	La b2	Mi b2	9
Do #3	La b	Mi b	8
Do	Sol	Re	7
Si	Fa #	Do #	6
Si^{b} 2	Fa #3	Do #3	5
Si^{b}	Fa	Do	4
La	Mi	Si	3
La b2	Mi b2	Si^{b} 2	2
La b	Mi b	Si^{b}	1
SOL (Upper String Free)	RE (Middle String Free)	LA (Lower String Free)	

Table 4 Notes and related pitches for the " Abdal Tuning System" (Bozuk Düzen, Kara Düzen) in the Long Neck Baglama family.

TOPIC 2: Short Neck Baglama Family – "Voice Tuning System for Çöğür Sazı":

This tuning system is also called the "Short Neck Baglama System" or "Çöğür Method." The tuning sounds for this system are given in Table 5, the musical notes and corresponding letters on the tuner are given in Table 6, and the letters on the tuner and corresponding musical notes are given in Table 7.

For Short Neck Çöğür saz, 0.18 mm string set is used.

Table 5 Short Neck Baglama Family – Sound Tuning System for Çöğür Saz

STRING GROUP	TUNING WHISTLE SOUND
I- Lower String	La
II- Medium String	Re
III- Upper String	Sol

Table 6 Musical notes and corresponding letters on the tuner.

MUSICAL NOTE	TUNING DEVICE LETTER EQUIVALENT
Do	C
Re	D
Mi	E
Fa	F
Sol	G
La	A
Si	B

Table 7 Letters on the tuner and their corresponding musical notes.

TUNING DEVICE LETTERS	CORRESPONDING MUSICAL NOTE
A	La
B	Si
C	Do
D	Re
E	Mi
F	Fa
G	Sol

Tuner Settings:

Tuning Frequency: 440 Hz.

Chromatic Scale

Key C

In order to be able to recognize the devices and instruments discussed within the scope of the work; Figure 1 shows various tuning devices, Figure 2 shows tuning whistle, Figure 3 shows capo types, Figure 4 shows Divan Saz and Short Neck Baglama, Figure 5 shows Tambura Saz - Long Neck Baglama, Figure 6 shows Cura and Saz - Long Neck Baglama, and Figure 7 shows Cura.

SHORT NECK BAGLAMA (8 STRINGS) TUNING SCHEME:

A- Short Neck Tuning System with the Tuning Whistle and Ear and the Strings Free:

I-Lower String Group:

Step 1: While blowing the sound of "La" on the tuning whistle, the peg of the first thin string at the bottom of the lower string group is turned freely (idle-without pressing any pitch) and gradually tightened, while the sound is obtained by hitting this string with the plectrum, when the sound on the whistle and the sound of the lower string are equal, the whistle is released, now the lowest string is tuned to the sound of "La".

Step 2: The peg of the second thin string in the middle of the lower string group is turned and gradually tightened, the sound is obtained by striking these two strings simultaneously with the plectrum, and the sound of this string is equalized with the sound of the first string at the bottom, which has just been tuned.

Step 3: The peg of the third string, the thin bam string, above the lower string group is also turned and gradually tightened, and its sound is equalized with the sound of the other two thin strings. At this time, the sound is obtained by striking these three strings simultaneously with the plectrum. After this stage, the lower string group of the bağlama becomes tuned within itself.

II-Middle String Group:

Step 4: While blowing the sound of "Re" on the tuning whistle, the peg of the first string at the bottom of the middle string group is turned freely (idle-without pressing any pitch) and gradually tightened, while the sound is obtained by hitting this string with a plectrum, when the sound on the whistle and the sound of the middle lower string are equal to each other, the whistle is released, the middle lower string is tuned to the sound of "Re".

Step 5: The peg of the second string at the top of the middle string group is turned and gradually tightened, the sound is obtained by hitting these two strings with a plectrum at the same time, and the sound of this string and the sound of the middle lower first string, which has just been tuned, are equalized to each other. After this stage, the middle string group of the bağlama becomes tuned within itself.

III-Upper String Group:

Step 6: While blowing the sound of "Mi" on the tuning whistle, the peg of the first thin string in the lowermost string in the upper string group is turned and gradually tightened, while the sound is obtained by hitting this string with the plectrum, when the sound on the whistle and the sound of the lower string of the upper group are equal to each other, the whistle is released, now the lower string of the upper group is tuned to the sound of "Mi".

Step 7: The peg of the second thin string in the middle of the upper string group is turned and gradually tightened, the sound is obtained by hitting these two strings simultaneously with the plectrum, and the sound of this string and the sound of the first lowest string of the upper group, which has just been tuned, are equalized to each other.

Step 8: The peg of the thick bam string, which is the third string at the top of the upper string group, is gradually tightened by turning it and its sound is equalized to the sound of the other two thin strings. At this time, the sound is obtained by hitting these three strings with a plectrum at the same time. After this stage, the upper string group of the bağlama becomes tuned within itself.

Step 9: The sound is obtained by hitting the lower string group, middle string group and upper string group with a plectrum at the same time and checking that the bağlama is fully tuned. The tuning control is confirmed by performing the choking operation in the short-neck bağlama arrangement for the note "La".

Note: If more than one person will be playing the instrument at the same time, after the first instrument is tuned as above, the lower string "La" sound of the other instrument or instruments should be taken from the instrument that was tuned first.

B- Short Neck Tuning system made by tightening the relevant pitch by pulling the "La" sound to a specified note with the Tuning Whistle and Ear:

I- Lower String Group:

Step 1: The relevant pitch is tightened with the capo and while blowing the sound of "La" on the tuning whistle, the peg of the first thin string at the bottom of the lower string group is turned and tightened gradually, while the sound is obtained by hitting this string with the plectrum, when the sound on the whistle and the sound of the lower string are equal to each other, the whistle is released, now the lowest string is tuned to the relevant pitch we want and tuned to the sound of "La".

Step 2: The peg of the second thin string in the middle of the lower string group is turned and gradually tightened, the sound is obtained by striking these two strings simultaneously with the plectrum, and the sound of this string is equalized with the sound of the first string at the bottom, which has just been tuned. Step 3: The peg of the third string, the thin bam string, above the lower string group is also turned and gradually tightened, and its sound is equalized with the sound of

the other two thin strings. At this time, the sound is obtained by striking these three strings simultaneously with the plectrum. After this stage, the lower string group of the bağlama becomes tuned within itself.

II-Middle String Group:
Step 4: The peg of the first string at the bottom of the middle string group is turned and gradually tightened, while the sound is obtained by striking this string and all the strings in the lower string group with the plectrum at the same time, and when the sound of the lower string group and the sound of the lower string in the middle are equalized, the tuning is achieved.

Step 5: The peg of the second string at the top of the middle string group is turned and gradually tightened, the sound is obtained by striking these two strings with the plectrum at the same time, and the sound of this string and the sound of the first lower string in the middle, which has just been tuned, are equalized. After this stage, the middle string group of the bağlama becomes tuned within itself.

III- Upper String Group:
Step 6: In the middle string group, the sound is obtained by pressing the "Mi" pitch (to be pressed on the middle string group). The peg of the first thin string at the bottom of the upper string group is turned and gradually tightened, while the sound is obtained by striking this string and all the strings in the middle string group simultaneously with the plectrum, and when the sound of the middle string group and the sound of the lowest string on top are equal to each other, the tuning is achieved.

Step 7: The peg of the second thin string in the middle of the upper string group is turned and gradually tightened, the sound is obtained by striking these two strings simultaneously with the plectrum, and the sound of this string and the sound of the first lowest string of the upper group, which has just been tuned, are equal to each other.

Step 8: The peg of the thick bam string, which is the third string at the top of the upper string group, is gradually tightened by turning it and its sound is equalized to the sound of the other two thin strings. At this time, the sound is obtained by hitting these three strings with a plectrum at the same time. After this stage, the upper string group of the bağlama becomes tuned within itself.

Step 9: The sound is obtained by hitting the lower string group, middle string group and upper string group with a plectrum at the same time and checking that the bağlama is fully tuned. For the note "La", the choking process is performed in the short-neck bağlama arrangement and the tuning control is confirmed in a way that will provide harmony.

Note: If more than one person will be playing the instrument at the same time, after the first instrument is tuned as above, the lower string "La" sound of the other instrument or instruments should be taken from the instrument that was tuned first.

C- Short Neck Tuning Scheme with the Tuner and the Strings Free:
I- Lower String Group:
Step 1: Turn on the tuner. Tuning Frequency: 440 Hz. Chromatic Scale and Key C settings should be visible on the device. The peg of the first thin string at the bottom of the lower string group is turned and gradually tightened while the sound is obtained by hitting this string with a plectrum, when the tuner shows the letter "A" the lowest string is now tuned to the sound of "La".

Step 2: The same process explained in Step 1 can be repeated for the second thin string in the middle of the lower string group. Or as another method; The peg of the second thin string in the middle of the lower string group is turned and gradually tightened, the sound is obtained by hitting these two strings with a plectrum at the same time, and the sound of this string and the sound of the first lowest string that has just been tuned are equalized.

Step 3: For the thin bam string, which is the third string above the lower string group, the steps done in Step 1 or Step 2 can be repeated. Or, the peg of the thin bam string, which is the third string above the lower string group, is gradually tightened by turning it, and its sound is equalized to the sound of the other two thin strings. At this time, the sound is obtained by striking these three strings simultaneously with the plectrum. After this stage, the lower string group of the bağlama becomes tuned within itself.

II-Middle String Group:
Step 4: In the lower string group, the sound is taken from the saz with a plectrum by pressing the "Re" pitch and it is observed which letter is lit on the tuning device. (The letter D should be lit; this corresponds to the "Re" sound). The peg of the first string at the bottom of the middle string group is turned and gradually tightened, while the sound is taken by hitting this string with the plectrum. When the letter just read from the tuning device is seen, the sound of the lower string group and the sound of the middle lower string in the middle are equalized and tuning is achieved.

Step 5: What was done in Step 4 is repeated for the upper second string of the middle string group. Or the peg of the upper second string of the middle string group is turned and gradually tightened, the sound is taken by hitting these two

strings at the same time with the plectrum and the sound of this string and the sound of the middle lower first string that was just tuned are equalized. After this stage, the middle string group of the bağlama becomes tuned within itself.

III- Upper String Group:
Step 6: In the middle string group, the sound is taken from the saz with a plectrum by pressing the "Mi" pitch (the middle string group will be pressed) and the letter that lights up on the tuning device is observed. (The letter E should light up, which corresponds to the "Mi" sound). The peg of the first string at the bottom of the upper string group is turned and gradually tightened, while the sound is taken by hitting this string with the plectrum. When the letter that was just read from the tuning device is seen, the sound of the middle string group and the sound of the lowest string in the upper group are equalized and tuning is achieved.

Step 7: The same process explained in Step 6 can be repeated for the second thin string in the middle of the upper string group. Or as another method; The peg of the second thin string in the middle of the upper string group is turned and gradually tightened, the sound is taken by hitting these two strings at the same time with the plectrum and the sound of this string and the sound of the first string at the bottom of the upper group that has just been tuned are equalized.

Step 8: The same process described in Steps 6 and 7 can be repeated for the top thick bam string of the upper string group. Or, as another method; The peg of the third string, the thick bam string, at the top of the upper string group, is gradually tightened by turning it and its sound is equalized to the sound of the other two thin strings. At this time, the sound is obtained by hitting these three strings with a plectrum at the same time. After this stage, the upper string group of the bağlama becomes tuned within itself.

Step 9: The sound is obtained by hitting the lower string group, middle string group and upper string group with a plectrum at the same time and checking that the bağlama is fully tuned. For the note "La", the choking process is performed in the short-neck bağlama arrangement and the tuning control is confirmed in a way that will provide sound harmony.

Note: If more than one person will be playing the instrument at the same time, after the first instrument is tuned as above, the lower string "La" sound of the other instrument or instruments should be taken from the instrument that was tuned first.

D-Short Neck Tuning System by tightening the relevant pitch with the Tuner and by pulling the "La" sound to a specified note:
I- Lower String Group:
Step 1: The tuner is turned on. Tuning Frequency: 440 Hz. Chromatic Scale and Key C settings should be visible on the device. The relevant pitch is tightened with the capo. The peg of the first thin string at the bottom of the lower string group is turned and gradually tightened, while the sound is obtained by hitting this string with the plectrum, when the tuner shows the letter "A", the lowest string is now tuned to the relevant pitch and tuned to the sound of "La".

Step 2: The same process explained in Step 1 can be repeated for the second thin string in the middle of the lower string group. Or as another method; The peg of the second thin string in the middle of the lower string group is turned and gradually tightened, the sound is obtained by hitting these two strings with the plectrum at the same time, and the sound of this string and the sound of the first string at the bottom that has just been tuned are equalized.

Step 3: For the thin bam string, which is the third string above the lower string group, the steps done in Step 1 or Step 2 can be repeated. Or, the peg of the thin bam string, which is the third string above the lower string group, is gradually tightened by turning it, and its sound is equalized to the sound of the other two thin strings. At this time, the sound is obtained by striking these three strings simultaneously with the plectrum. After this stage, the lower string group of the bağlama becomes tuned within itself.

II-Middle String Group:
Step 4: In the lower string group, the sound is taken from the saz with a plectrum by pressing the "Re" pitch and it is observed which letter is lit on the tuning device. The peg of the first string at the bottom of the middle string group is turned and gradually tightened, while the sound is taken by hitting this string with the plectrum. When the letter just read from the tuning device is seen, the sound of the lower string group and the sound of the middle lower string in the middle are equalized and tuning is achieved.

Step 5: What was done in Step 4 is repeated for the second string at the top of the middle string group. Or the peg of the second string at the top of the middle string group is turned and gradually tightened, the sound is taken by hitting these two strings at the same time with the plectrum and the sound of this string and the sound of the middle lower first string that was just tuned are equalized. After this stage, the middle string group of the bağlama becomes tuned within itself.

III- Upper String Group:
Step 6: In the middle string group, the sound is taken from the saz with a plectrum by pressing the "Mi" pitch (to be pressed on the middle string group) and the letter that lights up on the tuning device is observed. The peg of the first string at the bottom of the upper string group is turned and gradually tightened, while the sound is taken by hitting this

string with the plectrum. When the letter just read from the tuning device is seen, the sound of the middle string group and the sound of the lowest string in the upper group are equalized and tuning is achieved.

Step 7: The same process explained in Step 6 can be repeated for the second thin string in the middle of the upper string group. Or as another method; The peg of the second thin string in the middle of the upper string group is turned and gradually tightened, the sound is taken by hitting these two strings at the same time with the plectrum and the sound of this string and the sound of the first string at the bottom of the upper group that has just been tuned are equalized.

Step 8: The same process explained in Step 6 and Step 7 can be repeated for the top thick bam string of the upper string group. Or, as another method; The top thick bam string is rotated and gradually tightened to equalize its sound to the sound of the other two thin strings. At this time, the sound is obtained by hitting these three strings with a plectrum at the same time. After this stage, the upper string group of the bağlama becomes tuned within itself.

Step 9: The sound is obtained by hitting the lower string group, middle string group and upper string group with a plectrum at the same time, and the baglama is checked to see that it is fully tuned. For the note "La", the choking process is performed in the short-neck bağlama arrangement and the tuning control is confirmed in a way that will provide harmony.

Note: If more than one person will be playing the instrument at the same time, after the first instrument is tuned as above, the lower string "La" sound of the other instrument or instruments should be taken from the instrument that was tuned first.

SHORT NECK BAGLAMA (7 STRINGS) TUNING SCHEME:

A- Short Neck Tuning System with the Tuning Whistle and Ear and the Strings Free:

I-Lower String Group:

Step 1: While blowing the sound of "La" on the tuning whistle, the peg of the first thin string in the lower string group is turned freely (idle-without pressing any pitch) and gradually tightened, while the sound is obtained by hitting this string with a plectrum, when the sound on the whistle and the sound of the lower string are equal to each other, the whistle is released, now the lowest string is tuned to the sound of "La".

Step 2: The peg of the second thin string in the middle of the lower string group is turned and gradually tightened, the sound is obtained by hitting these two strings with a plectrum at the same time, and the sound of this string and the sound of the first lowest string, which has just been tuned, are equalized to each other.

Step 3: The peg of the thin bam string, which is the third string above the lower string group, is gradually tightened by turning it, and its sound is equalized to the sound of the other two thin strings. At this time, the sound is obtained by striking these three strings simultaneously with the plectrum. After this stage, the lower string group of the bağlama becomes tuned within itself.

II-Middle String Group:

Step 4: While blowing the sound of "Re" on the tuning whistle, the peg of the first string at the bottom of the middle string group is turned freely (idle-without pressing any pitch) and gradually tightened, while the sound is obtained by hitting this string with a plectrum, when the sound on the whistle and the sound of the middle lower string are equal to each other, the whistle is released, the middle lower string is tuned to the sound of "Re".

Step 5: The peg of the second string at the top of the middle string group is turned and gradually tightened, the sound is obtained by hitting these two strings with a plectrum at the same time, and the sound of this string and the sound of the middle lower first string, which has just been tuned, are equalized to each other. After this stage, the middle string group of the bağlama becomes tuned within itself.

III-Upper String Group:

Step 6: While blowing the sound of "Mi" on the tuning whistle, the peg of the first thin string at the bottom of the upper string group is turned freely (idle-without pressing any pitch) and gradually tightened, while the sound is obtained by hitting this string with a plectrum, when the sound on the whistle and the sound of the lower string of the upper group are equal to each other, the whistle is released, now the lower string of the upper group is tuned to the sound of "Mi".

Step 7: The peg of the thick bam string at the top of the upper string group is also turned and gradually tightened, and its sound is equalized to the sound of the other thin string. At this time, the sound is obtained by hitting these two strings with the plectrum at the same time. After this stage, the upper string group of the bağlama becomes tuned within itself.

Step 8: By simultaneously hitting the lower string group, middle string group and upper string group with a plectrum, the sound is taken and the tuning of the bağlama is checked. The tuning control is confirmed by performing the choking operation on the short neck bağlama arrangement for the note "La".

Note: If more than one person will be playing the instrument at the same time, after the first instrument is tuned as above, the lower string "La" sound of the other instrument or instruments should be taken from the instrument that was tuned first.

B- Short Neck Tuning system made by tightening the relevant pitch by pulling the “La” sound to a specified note with the Tuning Whistle and Ear:
I- Lower String Group:
Step 1: The pitch related to the capo is tightened and while blowing the sound of “La” on the tuning whistle, the peg of the first thin string at the bottom of the lower string group is turned and tightened gradually, while the sound is obtained by hitting this string with the plectrum, when the sound on the whistle and the sound of the lower string are equal to each other, the whistle is released, now the lowest string is tuned to the sound of “La”, pulled to the relevant pitch we want.

Step 2: The peg of the second thin string in the middle of the lower string group is turned and tightened gradually, the sound is obtained by hitting these two strings with the plectrum at the same time, and the sound of this string is equalized with the sound of the first lowest string, which has just been tuned.

Step 3: The peg of the third string, the thin bam string, located above the lower string group is also turned and tightened gradually, and its sound is equalized with the sound of the other two thin strings. Meanwhile, the sound is obtained by hitting these three strings with the plectrum at the same time. After this stage, the lower string group of the baglama becomes tuned within itself.

II-Middle String Group:
Step 4: The peg of the first string at the bottom of the middle string group is turned and gradually tightened, while the sound is obtained by striking this string and all the strings in the lower string group with the plectrum at the same time, and when the sound of the lower string group and the sound of the lower string in the middle are equalized, the tuning is achieved.

Step 5: The peg of the second string at the top of the middle string group is turned and gradually tightened, the sound is obtained by striking these two strings with the plectrum at the same time, and the sound of this string and the sound of the first lower string in the middle, which has just been tuned, are equalized. After this stage, the middle string group of the bağlama becomes tuned within itself.

III- Upper String Group:
Step 6: The sound is obtained by pressing the “Mi” pitch (to be pressed on the middle string group) in the middle string group. The peg of the first thin string at the bottom of the upper string group is turned and gradually tightened, while the sound is obtained by hitting this string and all the strings in the middle string group with the plectrum at the same time, and when the sound of the middle string group and the sound of the lowest string on top are equal to each other, the tuning is achieved.

Step 7: The peg of the thick bam string at the top of the upper string group is also turned and gradually tightened, and its sound is equalized to the sound of the other thin string. At this time, the sound is obtained by hitting these two strings with the plectrum at the same time. After this stage, the upper string group of the bağlama is tuned within itself.

Step 8: The sound is obtained by hitting the lower string group, middle string group and upper string group with the plectrum at the same time, and it is checked that the bağlama is fully tuned. For the note “La”, the choking process is done in the short neck baglama arrangement and the tuning control is confirmed in a way that will provide harmony.

Note: If more than one person will be playing the instrument at the same time, after the first instrument is tuned as above, the lower string “La” sound of the other instrument or instruments should be taken from the instrument that was tuned first.

C- Short Neck Tuning Scheme with the Tuner and the Strings Free:
I- Lower String Group:
Step 1: Turn on the tuner. Tuning Frequency: 440 Hz. Chromatic Scale and Key C settings should be visible on the device. The peg of the first thin string at the bottom of the lower string group is turned and gradually tightened while the sound is obtained by hitting this string with the plectrum, when the tuner shows the letter “A” the lowest string is now tuned to the sound of “La”.

Step 2: The same process explained in Step 1 can be repeated for the second thin string in the middle of the lower string group. Or as another method; The peg of the second thin string in the middle of the lower string group is turned and gradually tightened, the sound is obtained by hitting these two strings with the plectrum at the same time, and the sound of this string and the sound of the first lowest string that has just been tuned are equalized.

Step 3: For the thin bam string, which is the third string above the lower string group, the steps done in Step 1 or Step 2 can be repeated. Or, the peg of the thin bam string, which is the third string above the lower string group, is gradually tightened by turning it, and its sound is equalized to the sound of the other two thin strings. At this time, the sound is obtained by striking these three strings simultaneously with the plectrum. After this stage, the lower string group of the bağlama becomes tuned within itself.

II-Middle String Group:
Step 4: In the lower string group, the sound is taken from the saz with a plectrum by pressing the D pitch and it is observed which letter is lit on the tuning device. (The letter D should be lit, this corresponds to the "Re" sound). The peg of the first string at the bottom of the middle string group is turned and gradually tightened, while the sound is taken by hitting this string with the plectrum. When the letter just read from the tuning device is seen, the sound of the lower string group and the sound of the middle lower string in the middle are equalized and tuning is achieved.

Step 5: What was done in Step 4 is repeated for the upper second string of the middle string group. Or the peg of the upper second string of the middle string group is turned and gradually tightened, the sound is taken by hitting these two strings at the same time with the plectrum and the sound of this string and the sound of the middle lower first string that was just tuned are equalized. After this stage, the middle string group of the bağlama becomes tuned within itself.

III- Upper String Group:
Step 6: In the middle string group, the sound is taken from the saz with a plectrum by pressing the "Mi" pitch (the middle string group will be pressed) and the letter that lights up on the tuning device is observed. (The letter "E" should light up, which corresponds to the "Mi" sound). The peg of the first string at the bottom of the upper string group is turned and gradually tightened, while the sound is taken by hitting this string with the plectrum. When the letter just read from the tuning device is seen, the sound of the middle string group and the sound of the lowest string in the upper group are equalized and tuning is achieved.

Step 7: The peg of the thick bam string at the top of the upper string group is also turned and gradually tightened, and its sound is equalized to the sound of the other thin string. At this time, the sound is taken by hitting these two strings with the plectrum at the same time. After this stage, the upper string group of the bağlama becomes tuned within itself.

Step 8: By simultaneously hitting the lower string group, middle string group and upper string group with a plectrum, the sound is taken and the bağlama is checked to be fully tuned. For the note "La", the choking process is done in the short neck bağlama arrangement and the tuning control is confirmed to provide harmony of sound.

Note: If more than one person will be playing the instrument at the same time, after the first instrument is tuned as above, the lower string "La" sound of the other instrument or instruments should be taken from the instrument that was tuned first.

D- Short Neck Tuning System by tightening the relevant pitch with the Tuner and by pulling the "La" sound to a specified note:

I- Lower String Group:

Step 1: The tuner is turned on. Tuning Frequency: 440 Hz. Chromatic Scale and Key C settings should be visible on the device. The relevant pitch is tightened with the capo. The peg of the first thin string at the bottom of the lower string group is turned and gradually tightened, while the sound is obtained by hitting this string with the plectrum, when the tuner shows the letter "A", the lowest string is now tuned to the relevant pitch and tuned to the sound of "La".

Step 2: The same process explained in Step 1 can be repeated for the second thin string in the middle of the lower string group. Or as another method; The peg of the second thin string in the middle of the lower string group is turned and gradually tightened, the sound is obtained by hitting these two strings at the same time with the plectrum, and the sound of this string and the sound of the first lowest string that has just been tuned are equalized.

Step 3: For the thin bam string, which is the third string above the lower string group, the steps done in Step 1 or Step 2 can be repeated. Or, the peg of the thin bam string, which is the third string above the lower string group, is gradually tightened by turning it, and its sound is equalized to the sound of the other two thin strings. At this time, the sound is obtained by striking these three strings simultaneously with the plectrum. After this stage, the lower string group of the bağlama becomes tuned within itself.

II-Middle String Group:
Step 4: In the lower string group, the sound is taken from the saz with a plectrum by pressing the "Re pitch and it is observed which letter is lit on the tuning device. The peg of the first string at the bottom of the middle string group is turned and gradually tightened, while the sound is taken by hitting this string with the plectrum. When the letter just read from the tuning device is seen, the sound of the lower string group and the sound of the middle lower string in the middle are equalized and tuning is achieved.

Step 5: What was done in Step 4 is repeated for the second string at the top of the middle string group. Or the peg of the second string at the top of the middle string group is turned and gradually tightened, the sound is taken by hitting these two strings at the same time with the plectrum and the sound of this string and the sound of the middle lower first string that was just tuned are equalized. After this stage, the middle string group of the bağlama becomes tuned within itself.

III- Upper String Group:

Step 6: In the middle string group, the sound is taken from the saz with a plectrum by pressing the “Mi” pitch (to be pressed on the middle string group) and the letter that lights up on the tuning device is observed. The peg of the first string at the bottom of the upper string group is turned and gradually tightened, while the sound is taken by hitting this string with the plectrum. When the letter just read from the tuning device is seen, the sound of the middle string group and the sound of the lowest string in the upper group are equalized and tuning is achieved.

Step 7: The same process explained in Step 6 can be repeated for the top thick bam string of the upper string group. Or as another method; The peg of the thick bam string at the top of the upper string group is also turned and gradually tightened, and its sound is equalized to the sound of the other thin string. At this time, the sound is taken by hitting these two strings with the plectrum at the same time. After this stage, the upper string group of the bağlama becomes tuned within itself.

Step 8: By simultaneously hitting the lower string group, middle string group and upper string group with a plectrum, the sound is taken and the tuning of the bağlama is checked. For the note “La”, the choking process is done in the short neck bağlama arrangement and the tuning control is confirmed in a way that will give harmony to the sound.

Note: If more than one person will be playing the instrument at the same time, after the first instrument is tuned as above, the lower string “La” sound of the other instrument or instruments should be taken from the instrument that was tuned first.

The notes and related pitches for the “Çöğür Tuning System” - “Çöğür Düzeni” in the Short Neck Baglama family are shown in Table 8.

Upper String Group	Middle String Group	Lower String Group	Pitch No
Si	La	Mi	19
Si^{b}	La^{b}	Mi^{b}	18
La	Sol	Re	17
La^{b2}	$Fa^{\#}$	$Do^{\#}$	16
La^{b}	$Fa^{\#3}$	$Do^{\#3}$	15
Sol	Fa	Do	14
$Fa^{\#}$	Mi	Si	13
$Fa^{\#3}$	Mi^{b2}	Si^{b2}	12
Fa	Mi^{b}	Si^{b}	11
Mi	Re	La	10
Mi^{b2}	$Do^{\#}$	La^{b2}	9
Mi^{b}	$Do^{\#3}$	La^{b}	8
Re	Do	Sol	7
$Do^{\#}$	Si	$Fa^{\#}$	6
$Do^{\#3}$	Si^{b2}	$Fa^{\#3}$	5
Do	Si^{b}	Fa	4
Si	La	Mi	3
Si^{b2}	La^{b2}	Mi^{b2}	2
Si^{b}	La^{b}	Mi^{b}	1
SOL (Upper String Free)	RE (Middle String Free)	LA (Lower String Free)	

Table 8 Notes and related pitches for the " Çöğür Tuning System" - " Çöğür Düzeni" in the Short Neck Bağlama family.

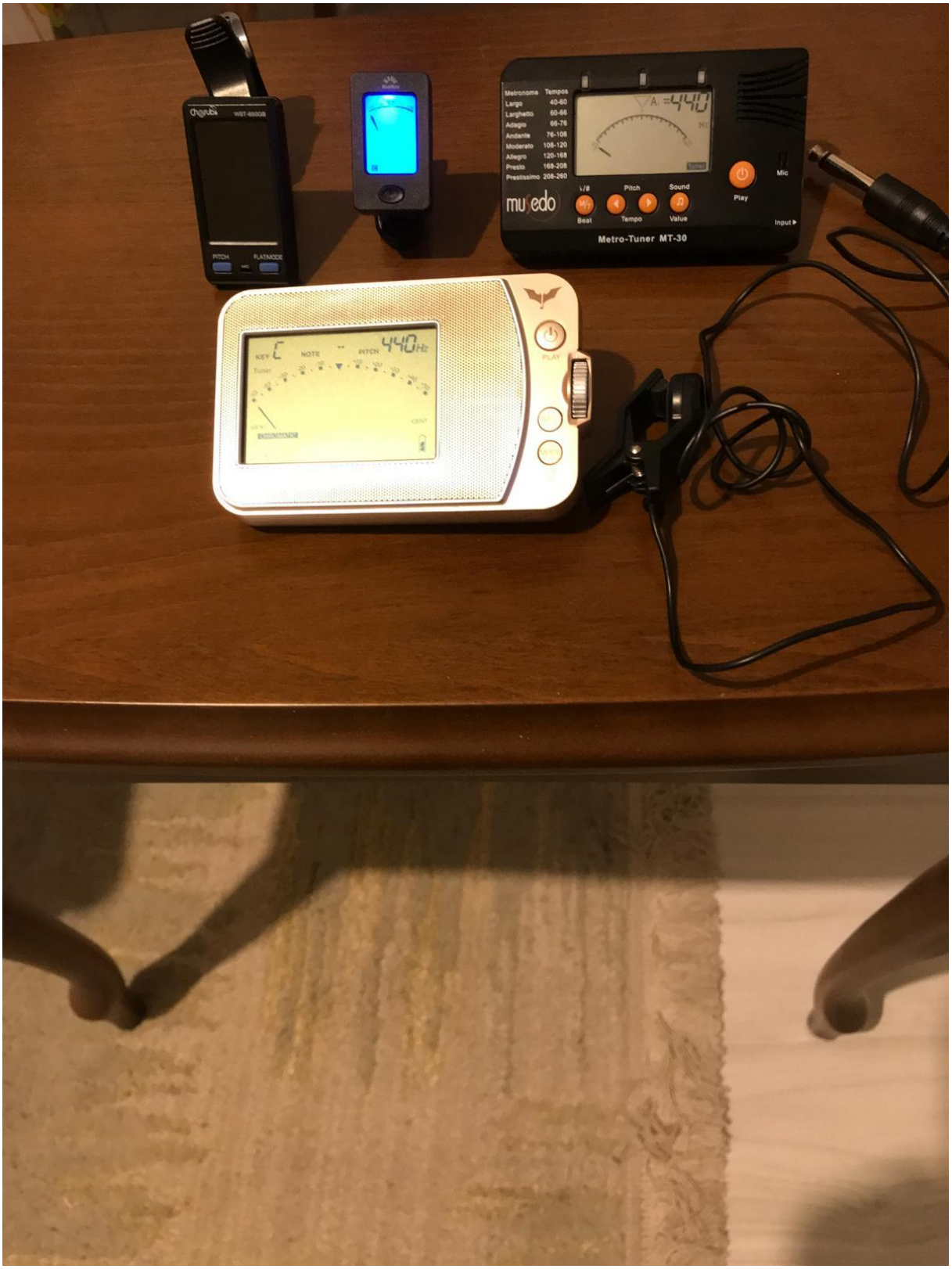

Figure 1 Tuners.

Figure 2 Tuning Whistle.

Figure 3 Types of capos.

Figure 4 Divan Saz and Short Neck (Çöğür) Baglama.

Figure 5. Saz –Tambura Saz-Long Neck Baglama.

Figure 6 Cura and Saz- Long Neck Baglama.

Figure 7 Cura.

Author's Biography:

Asst.Prof. Dr. Emin Taner ELMAS is a Mechanical Engineer having degrees of B.Sc., M.Sc., Ph.D., and was born in Sivas in 1974. He completed his doctorate at Ege University, Graduate School of Natural and Applied Sciences, Mechanical Engineering Department, Thermodynamics Science Branch, and his master's degree at Dokuz Eylül University, Mechanical Engineering Department, Energy Science Branch. He also completed his undergraduate education at Hacettepe University, ZEF, Mechanical Engineering Department and graduated from the faculty with honors in 1995 and became a mechanical engineer. He was awarded a non-refundable scholarship by the Turkish Chamber of Mechanical Engineers in his 4th year because he was the most succesful student during his first 3 classes study at the faculty. He graduated from İzmir Atatürk High School in 1991.

Asst. Prof. Dr. ELMAS has completed his military service as a NATO Officer in Bosnia and Herzegovina. He was a "Reserved Officer" as a "2nd Lieutenant" as an "English-Turkish Interpreter". He was also a "Guard Commander" and served in Sarajevo, Camp Butmir within the SFOR task force of NATO. He has been awarded with 2 (two) NATO Medals and Turkish Armed Forces Service Certificate of Pride (Bosnia & Herzegovina).

In addition to his academic duties at universities, he has worked as an engineer and manager in various industrial institutions, organizations and companies; He has served as Construction Site Manager, Project Manager, Management Representative, Quality Manager, Production Manager, Energy Manager, CSO-CTO, CBDO, Factory Manager, Deputy General Manager and General Manager.

Asst. Prof. Dr. Elmas is Department Head and is an Assistant Professor of Automotive Technology at the Department of Motor Vehicles and Transportation Technologies at Vocational School of Higher Education for Technical Sciences at IGDIR UNIVERSITY, Turkey. He is also an Assistant Professor of Bioengineering & BioSciences at the same university. He has nearly 30 years of total experience in academia and in industry.

He has served as a scientific referee and panelist for ASME, TUBITAK and many scientific institutions, organizations and universities, including NASA.

"Mechanical Engineering, Energy Transfer, Thermodynamics, Fluid Mechanics, Heat Transfer, Higher Mathematics, Evaporation, Heat Pipes, Space Sciences, Automotive, Bioengineering, Medical Engineering Applications, Neuroengineering, Medical Technique" are his academic and scientific fields of study; "Heating-Ventilation Air Conditioning Applications, Pressure Vessels, Heat Exchangers, Energy Efficiency, Steam Boilers, Power Plants, Cogeneration, Water Purification, Water Treatment, Industrial Equipment and Machinery, Welding Manufacturing, Sheet Metal Forming, Machining" are his industrial experience fields.

Asst. Prof. Dr. Emin Taner ELMAS is also a musician, saz (baglama) virtuoso player and ney (Nay, Turkish Reed Flute) performer. He has a YouTube Music Channel (Emin Taner ELMAS) which includes some of his sound recordings of him playing the saz-baglama and blowing the ney. He composed the poem written by the great poet Âşık Veysel ŞATIROĞLU under the name of "Raşit Bey" in memory of his father Judge (Hâkim) Raşit ELMAS as "Raşit Bey Türküsü", wrote it down, notated and published it as an academic article and broadcasted this song on his own music channel. He also wrote the poems "Canım Babam" and "Geldim Babam" which he wrote also in memory of his father and published in an academic literature journal. He continues his artistic studies by writing various poetry, lyrics and also realizing musical composition works.

References

1. ELMAS, Emin Taner. (2025). Musical Composed Poetry - A Folk Song Musical Composition named as "Raşit Bey Türküsü", composed from the Poetry "Raşit Bey"; (in memory of Judge (Hâkim) "Raşit Elmas"). In Global Journal of Research in Education & Literature (Vol. 5, Number 2, pp. 1–13). https://doi.org/10.5281/zenodo.14976001.
2. ELMAS, Emin Taner. (2024). (Original Poetry Literature): The Poetry "Raşit Bey"; (in memory of Judge (Hâkim) "Raşit Elmas"). In Global Journal of Research in Education & Literature (Vol. 4, Number 3, pp. 1–3). https://doi.org/10.5281/zenodo.11179779
3. Emin Taner ELMAS, Youtube Music Channel https://www.youtube.com/@emintanerelmas4776
4. Emin Taner ELMAS, Youtube Music Channel, “Raşit Bey” Türküsü, https://www.youtube.com/watch?v=pVa1wL9yVbU
5. ELMAS, Emin Taner. (2024). (Original Poetry Literature): The Poem "Canım Babam"; in memory of "Raşit Elmas". In Global Journal of Research in Education & Literature (Vol. 4, Number 2, pp. 9–12). https://doi.org/10.5281/zenodo.10914425.
6. ELMAS, Emin Taner. (2024). (Original Poetry Literature): The Poem "Geldim Babam"; (in memory of Judge (Hâkim) "Raşit Elmas"). In Global Journal of Research in Education & Literature (Vol. 4, Number 6, pp. 64–67). https://doi.org/10.5281/zenodo.14218289
7. ELMAS, Emin Taner. (2025). (Saz -Bağlama Akort Sistemi Metodu) Uzun Sap Bağlama Ailesi - Divan Sazı, Tambura ve Cura için Abdal Düzeni Ses Akordu ile Kısa Sap Bağlama Ailesi – Çöğür Sazı için Ses Akort Düzeni. In Global Journal of Research in Education & Literature (Vol. 5, Number 2, pp. 46–72). https://doi.org/10.5281/zenodo.15103469

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