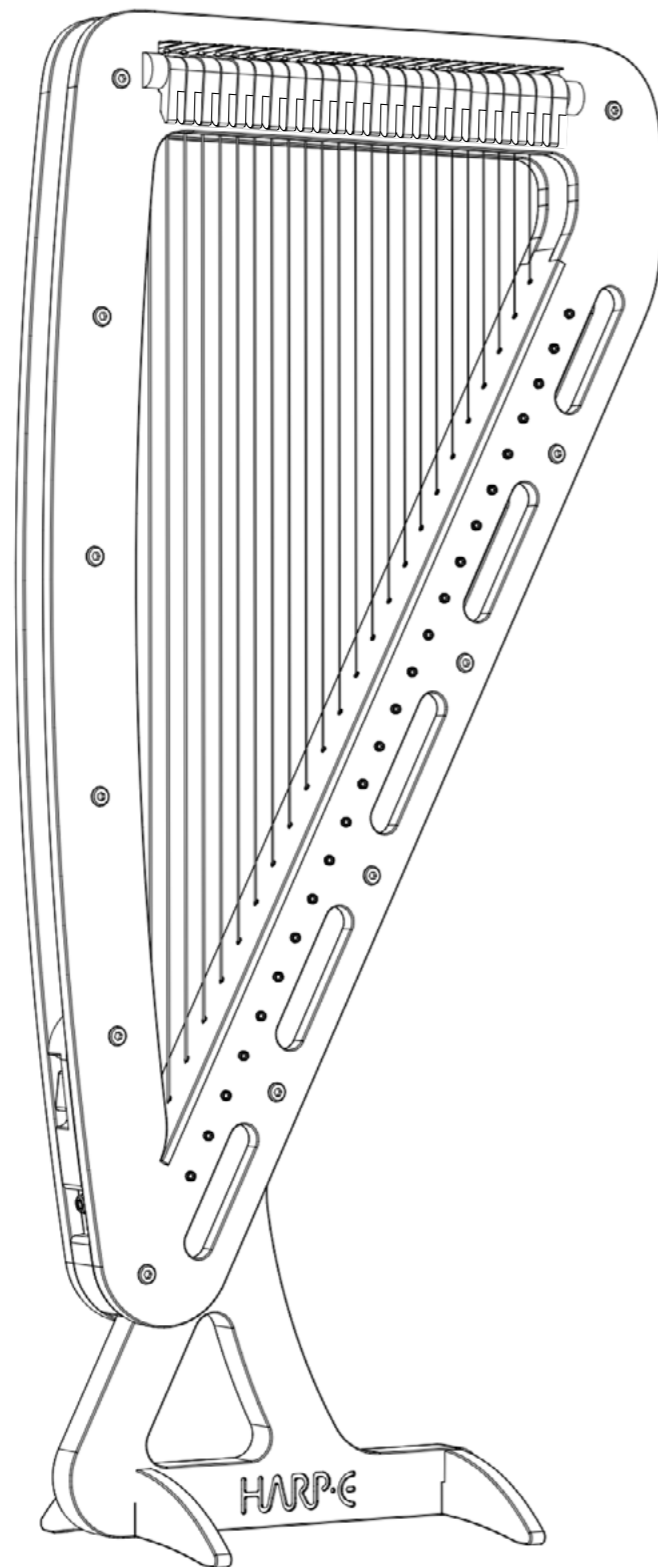




Designed in London by Joris Beets Design



## Harp-E v.3 Assembly Manual

25/10/2023

# INDEX

## DIY PACKAGE ..... 2

This kit contains	3
Additional tools, optional tools and preparing your workspace	5
1. Lever rig	6
2. Electronics rig	7
3. Soundboard	8
4. Frame back	9
5. Frame insides	10
6. Frame front	12
7. Tuning pins	14

## STRING & GO PACKAGE ..... 16

This kit contains	17
Additional tools and optional tools	18
Preliminary steps	19
1. Eyelets	20
2. Strings	21
3. Stickers and battery	24
4. Tune sharp	25
5. Repeat until stable	27
6. Adjust flat	28
7. Troubleshooters	29

## PLUG & PLAY PACKAGE ..... 31

This kit contains	32
1. Stickers and battery	33
2. Using Harp-E	34

WE HIGHLY RECOMMEND WATCHING THE ASSEMBLY VIDEOS  
FOR A MORE DETAILED AND EASY TO FOLLOW ASSEMBLY TUTORIAL!



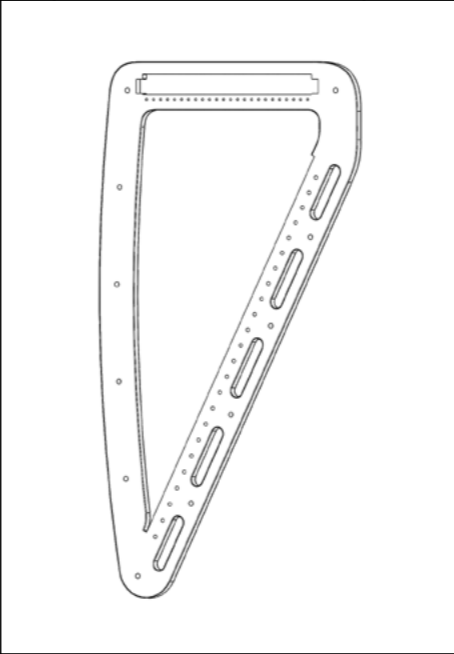
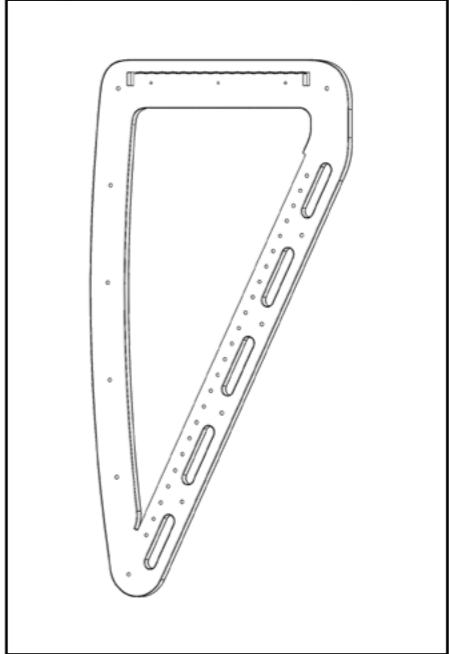
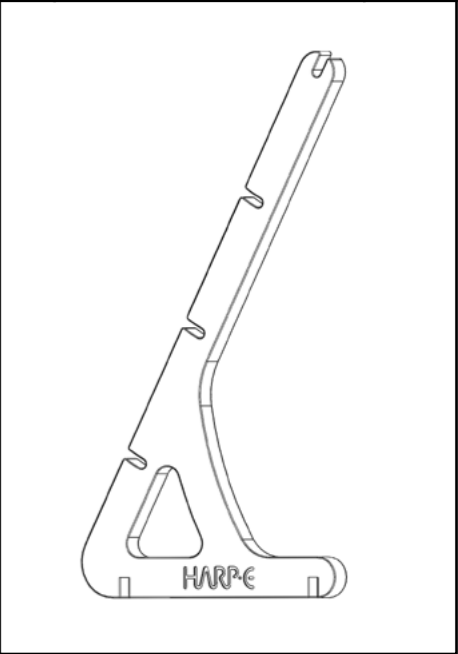
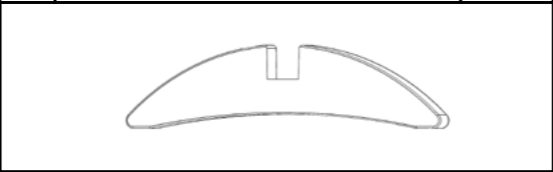
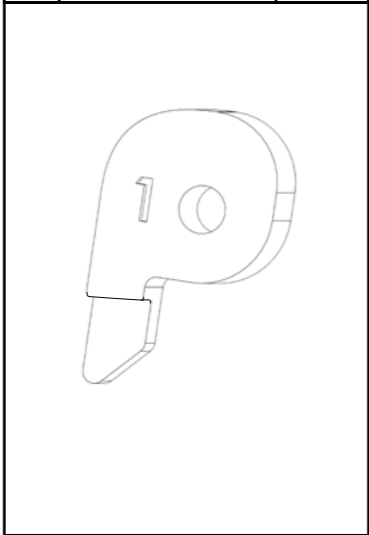
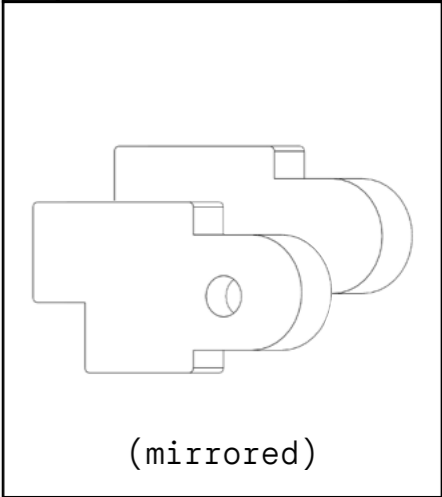
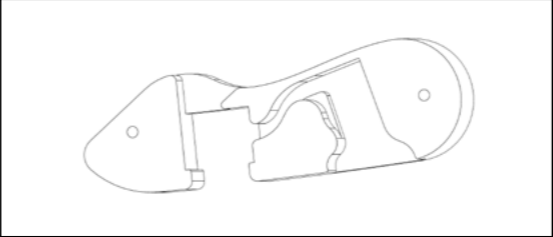
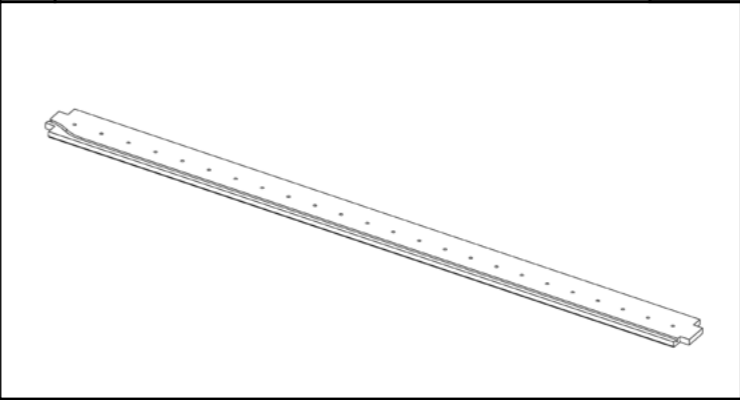
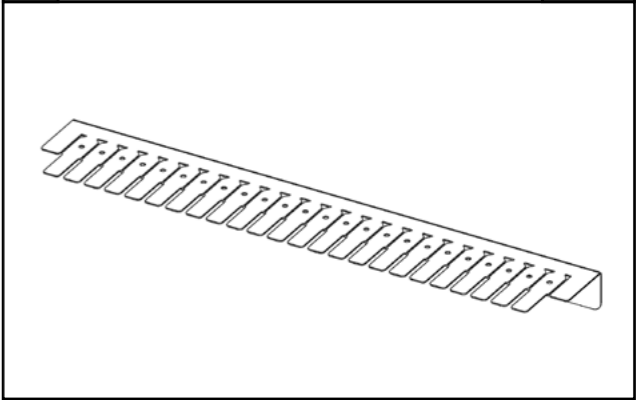
Scan this QR code or visit the *Getting Started* page on the Harp-E website [🔗](#) to watch the assembly, stringing and setting up videos.

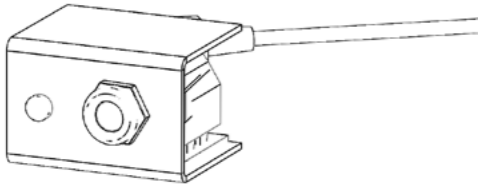
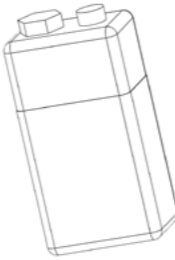



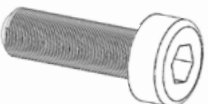

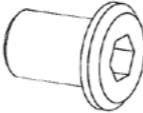



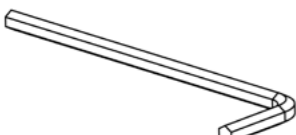




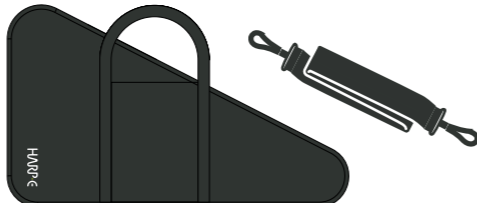
If you would like to suggest improvements to this manual, please send us an email at [elvire@jorisbeetsdesign.com](mailto:elvire@jorisbeetsdesign.com)

# DIY PACKAGE

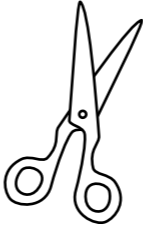
Assembling

# THIS KIT CONTAINS




A	Frame Front	x01	B	Frame Back	x01	C	Stand	x01
								
D	Feet	x02	F	Levers	x24	G	Mechanism Connectors	x02
						 (mirrored)		
E	Housing for Pre-amp Unit & Battery	x01	H	Soundboard	x01	I	Mechanism Sheet	x01
								

J	Pre-amp Unit & Sensor	x01	K	Battery	x01	L	Strings	x24	
									
M	Mechanism Tube		x01	N	Mechanism Spacer Rings		x25		
									
O	Mechanism Regulator Bolts	x27	P	Tuning Pins	x24	Q	Sleeve Nuts	x11	
									
R	Bolts	x11	S	Spacer Washers	x09	T	Regulator Key	x01	
									
U	Assembly & Tuning Keys		x02	V	Eyelets	x48	W	Red & Black Stickers	x14
									
X	Felt Sticker	x01	Y	Silicone Stickers	x04	Bag, Strap, Strap Buckles			
									

# ADDITIONAL TOOLS

Scissors	x01
	

# OPTIONAL TOOLS TO SPEED-UP THE PROCESS

Electric screwdriver	x01	Thin screwdriver	x01	Sellotape	x01
					
with M3 and M4 hex bits					

# PREPARING YOUR WORKSPACE

You just need a clean and flat workspace.

For those with uncoated DIY packages, if you feel like certain areas in the wood are too rough for coating later on, you may lightly sand them.

Take all the metallic parts out of their plastic bags, and make little piles of them inside the long cardboard box.

Count the parts to make sure you have the right number of each. For some small parts there are a few spare included.

If needed, use some tissue to wipe off excess grease on metallic parts, and let the cardboard soak up the rest while you assemble.

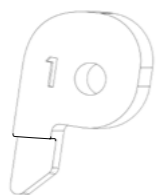
## LEFT-HANDED HARP

To assemble a harp for left-hand playing, you should do the assembly mirrored. Indications are given in green boxes in this manual.

# 1

## LEVER RIG

Fx24



Gx02



Mx01



Nx25

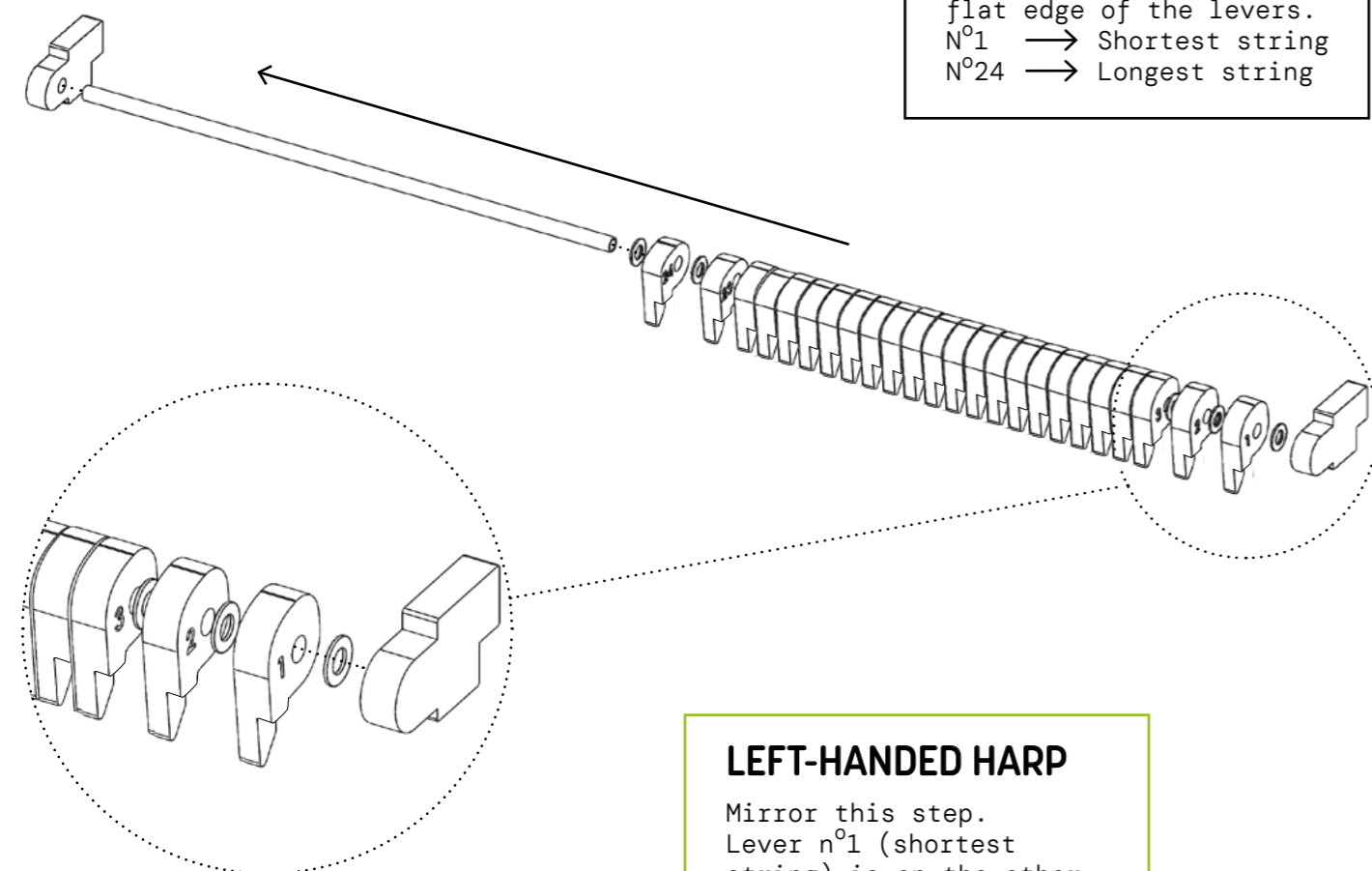


### Note

Lever n°1 is on the right side when facing the flat edge of the levers.  
N°1 → Shortest string  
N°24 → Longest string

### LEFT-HANDED HARP

Mirror this step.  
Lever n°1 (shortest string) is on the other side: on the left of the tube as seen in the picture above.



A small gap between the last lever and connector (G) is normal as wood thicknesses vary slightly. The levers can be evenly spaced out later after stringing the harp. If the total gap is more than a few millimetres, you could add the spare rings (N) to fill that gap, for instance after the first and second octaves.

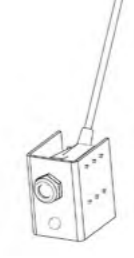
# 2

## ELECTRONICS RIG

Ex01



Jx01



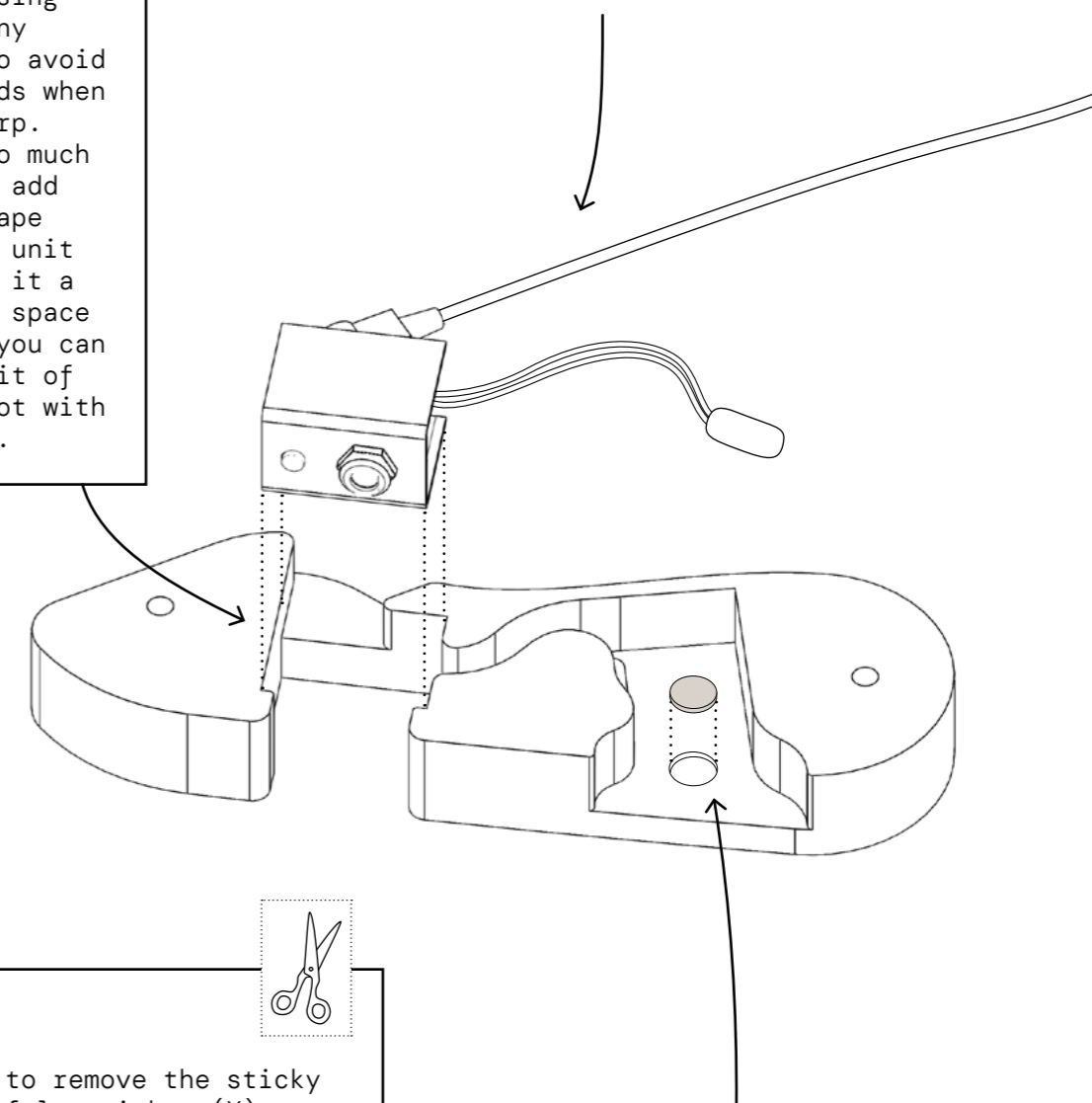
Xx01



The preamp unit (J) should fit snugly inside the housing (E), without any wiggle room, to avoid vibration sounds when playing the harp. If you have too much space, you can add bits of sellotape to the pre amp unit (J) to thicken it a little. If the space is too tight, you can scrape off a bit of wood in the slot with a sharp object.



It is very important not to squeeze, dent or fold the sensor (the long black cable coming out of the pre-amp unit).



### Note

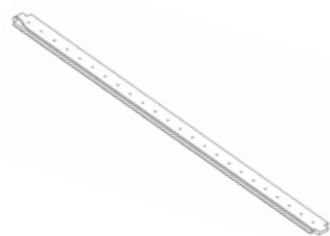
Be careful not to remove the sticky layer from the felt sticker (X). The easiest way is to gently fold the felt sticker backwards a few times until the film separates. If you accidentally remove the sticky layer, it's no problem. Just put a little bit of super glue on the back of the sticker.

The felt sticker (X) in the cavity will ensure the battery is tightly held, to prevent vibration noises in the harp.

# 3

## SOUNDBOARD

Hx01

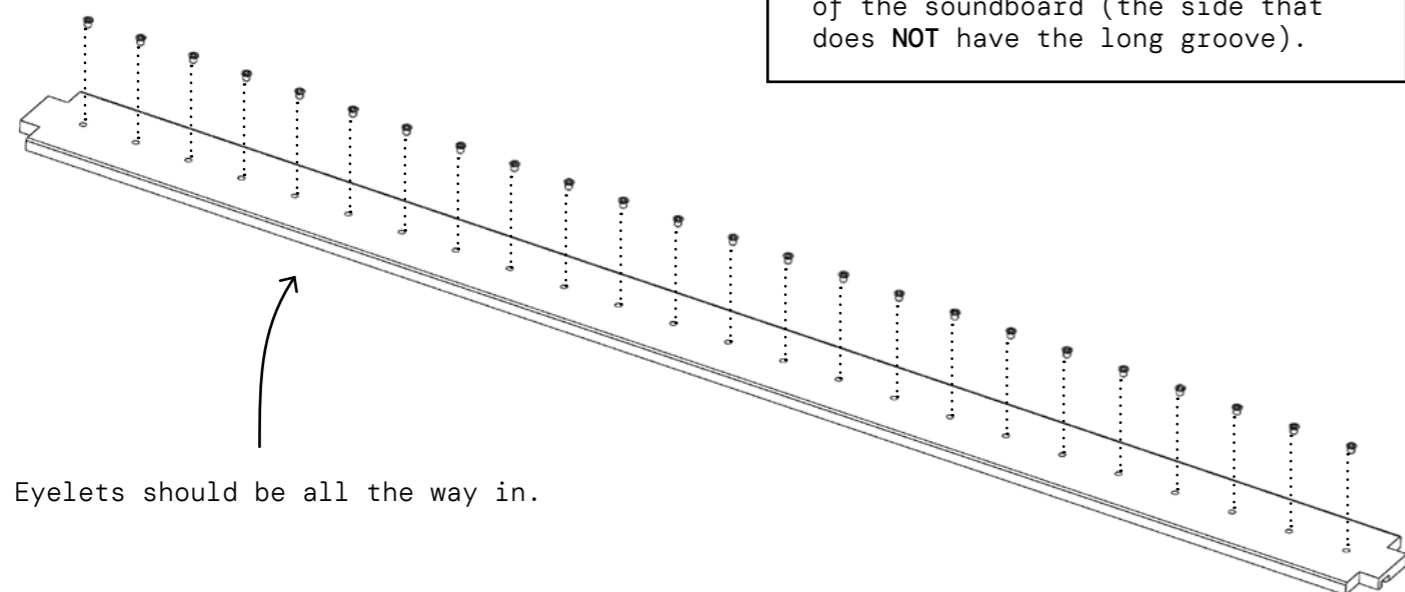


Vx24



### Note

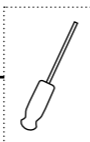
Notice the orientation: you should insert the eyelets (V) from the top of the soundboard (the side that does **NOT** have the long groove).



Eyelets should be all the way in.

### Tip

The holes are tight so eyelets (V) may be difficult to push in. If you have one, use a thin screwdriver to place and push eyelets in. You can also use a hard object (a hammer or a foot of Harp·E) wrapped in tissue to help pushing.



Check that none of the eyelets are deformed and all looks good. Deformed eyelets can develop sharp edges that cut into the strings and cause them to break over time.

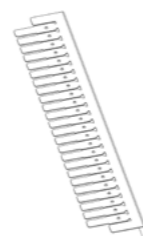
# 4

## FRAME BACK

Bx01



Ix01



Ox03



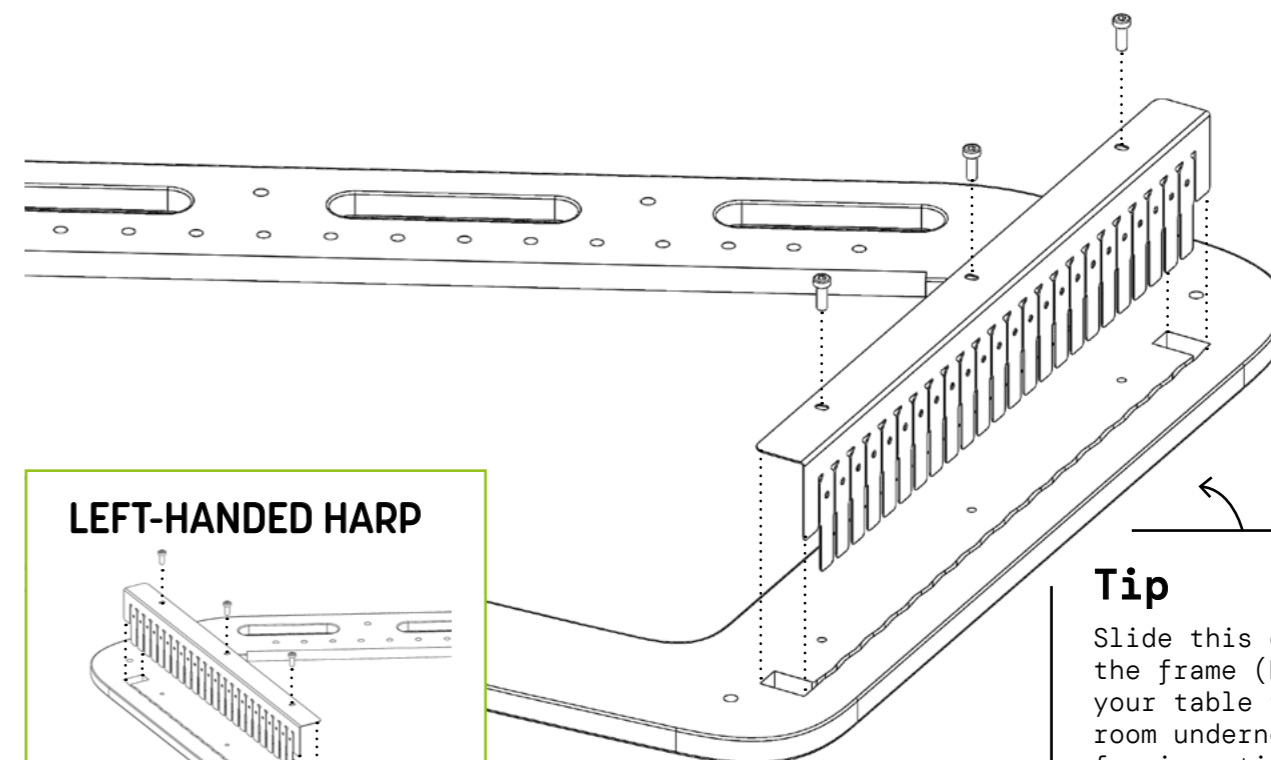
Rx11



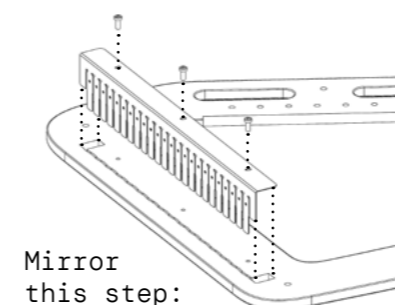
Tx01



Ux01



### LEFT-HANDED HARP

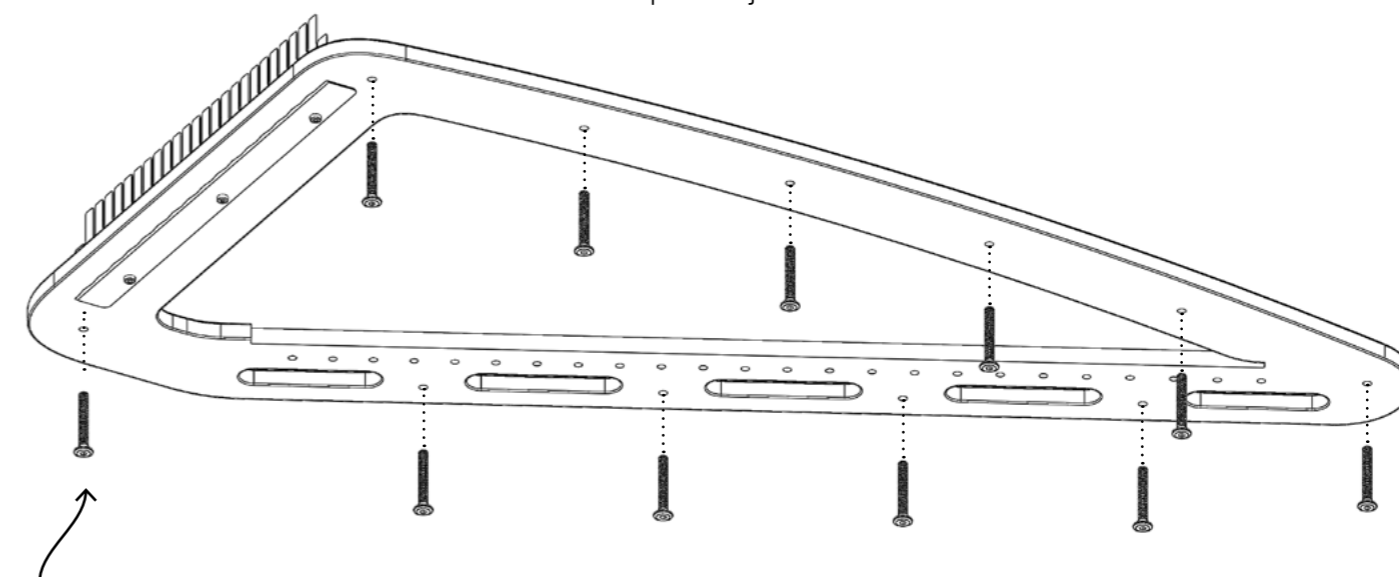


Mirror this step:

### Tip

Slide this end of the frame (B) off your table to make room underneath for inserting the mechanism sheet (I) & bolts (O).

Flip the frame.

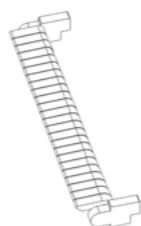


By sliding the frame (B) off your table, you can insert the bolts (R) one by one from underneath.

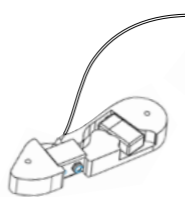
# 5

## FRAME INSIDES

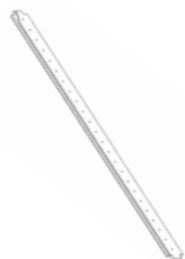
Step 1



Step 2



Step 3

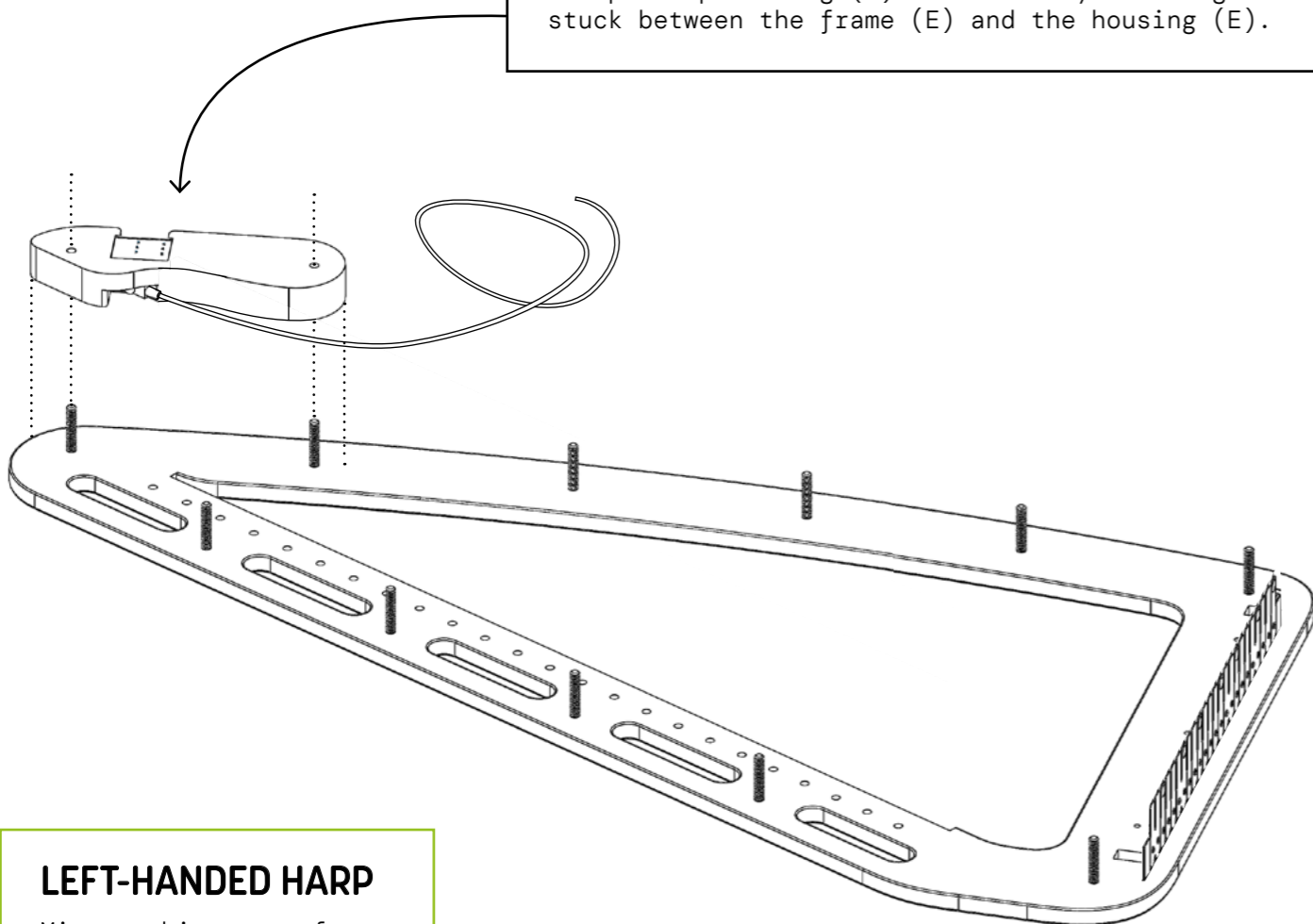


Sx09



### Note

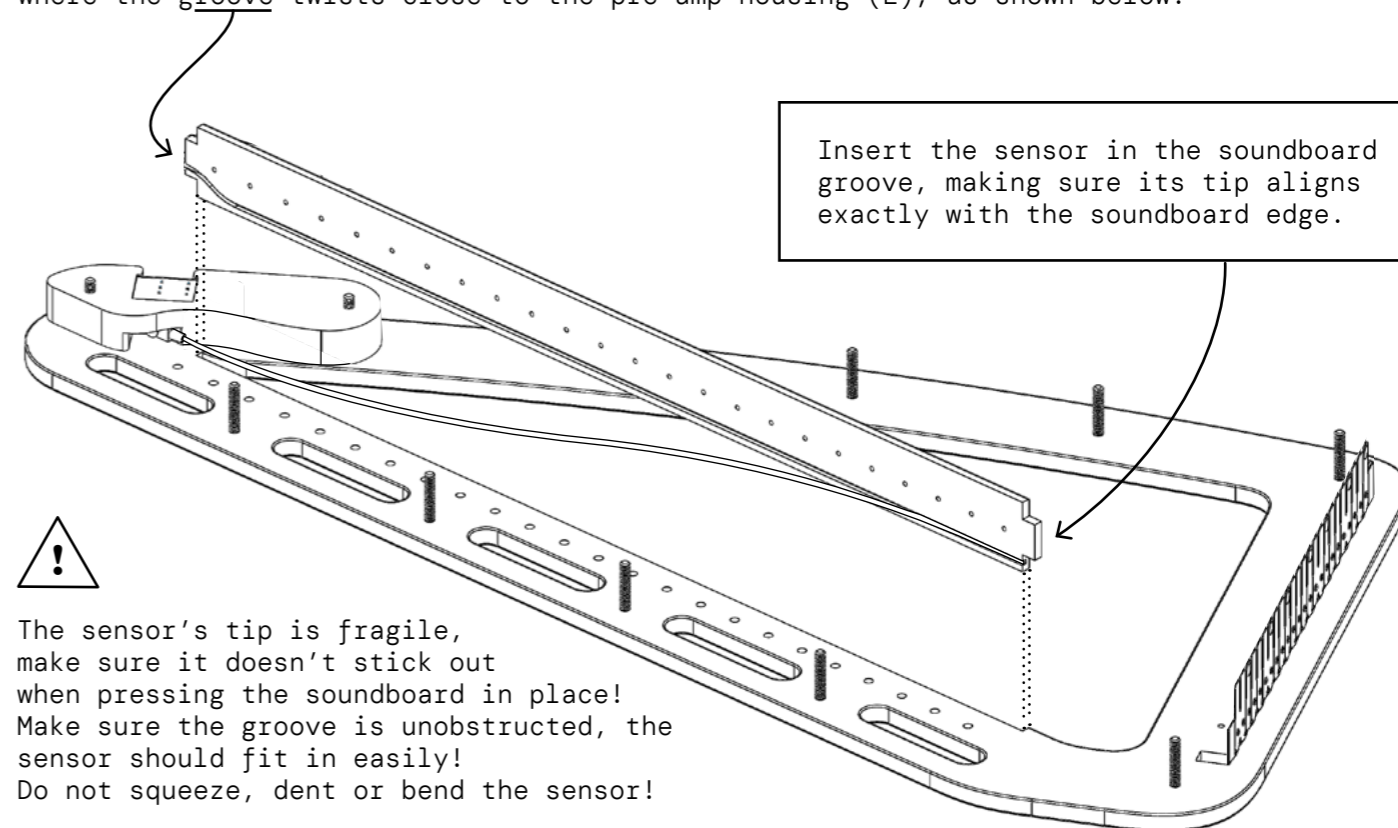
Make sure the battery wires follow the groove in the pre-amp housing (E) so that they do not get stuck between the frame (E) and the housing (E).



### LEFT-HANDED HARP

Mirror this step: for you the pre-amp housing will have the cavities for the battery and wires facing upwards.

For both right and left-handed assembly: the soundboard (H) should have the groove on the side of the frame handles (towards you in the setting shown below) and the side where the groove twists close to the pre-amp housing (E), as shown below.



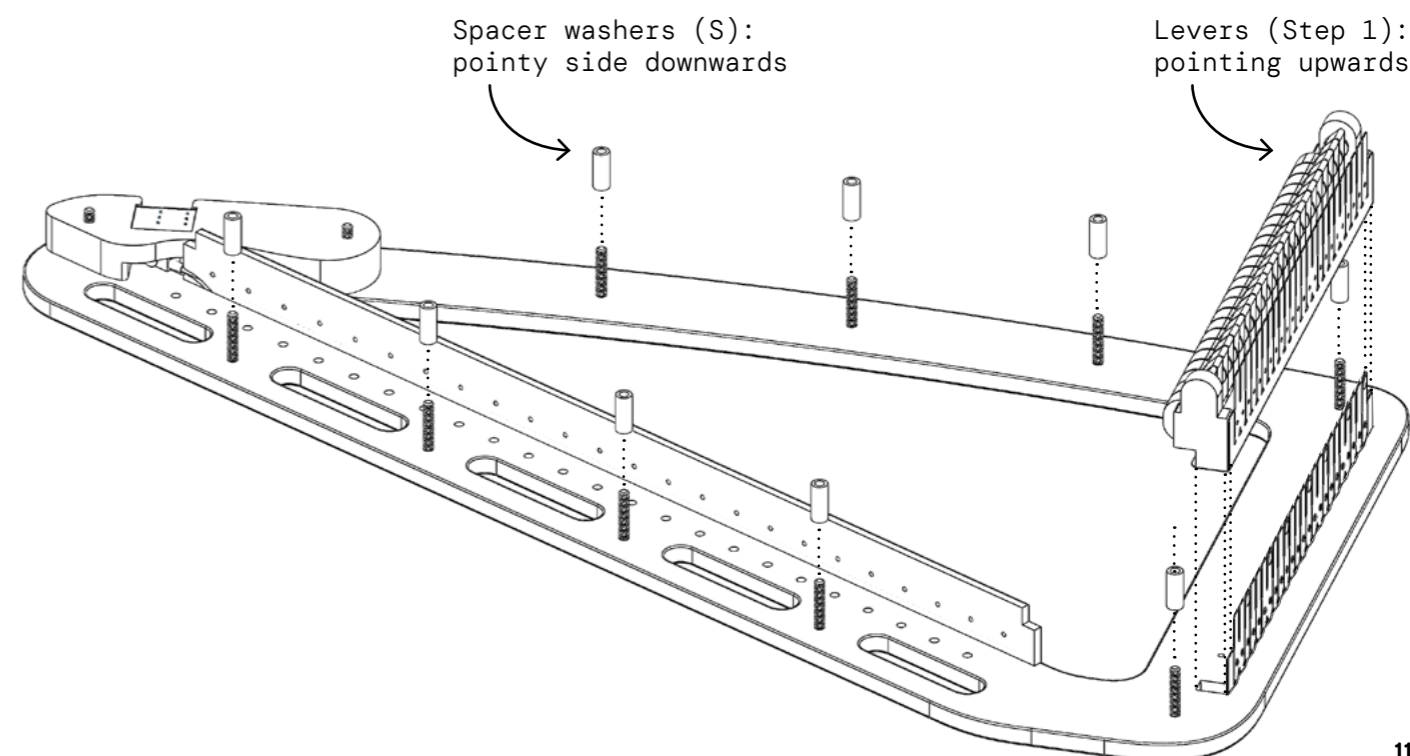
The sensor's tip is fragile, make sure it doesn't stick out when pressing the soundboard in place! Make sure the groove is unobstructed, the sensor should fit in easily! Do not squeeze, dent or bend the sensor!

### Tip

To put the soundboard in place, insert the bottom side (left here) in the slot, then slightly bend the soundboard to put the other end in place.



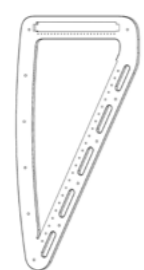
Check that the sensor is neatly inside the groove all along and is not being squeezed or pinched anywhere.



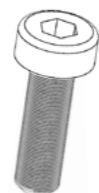
# 6

## FRAME FRONT

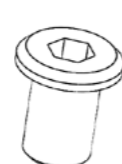
Ax01



Ox24



Qx11



Tx01



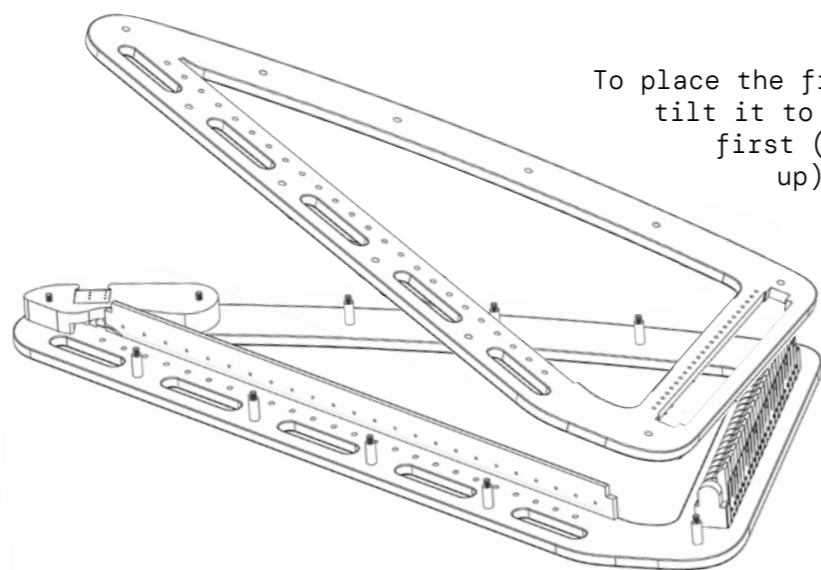
Ux02



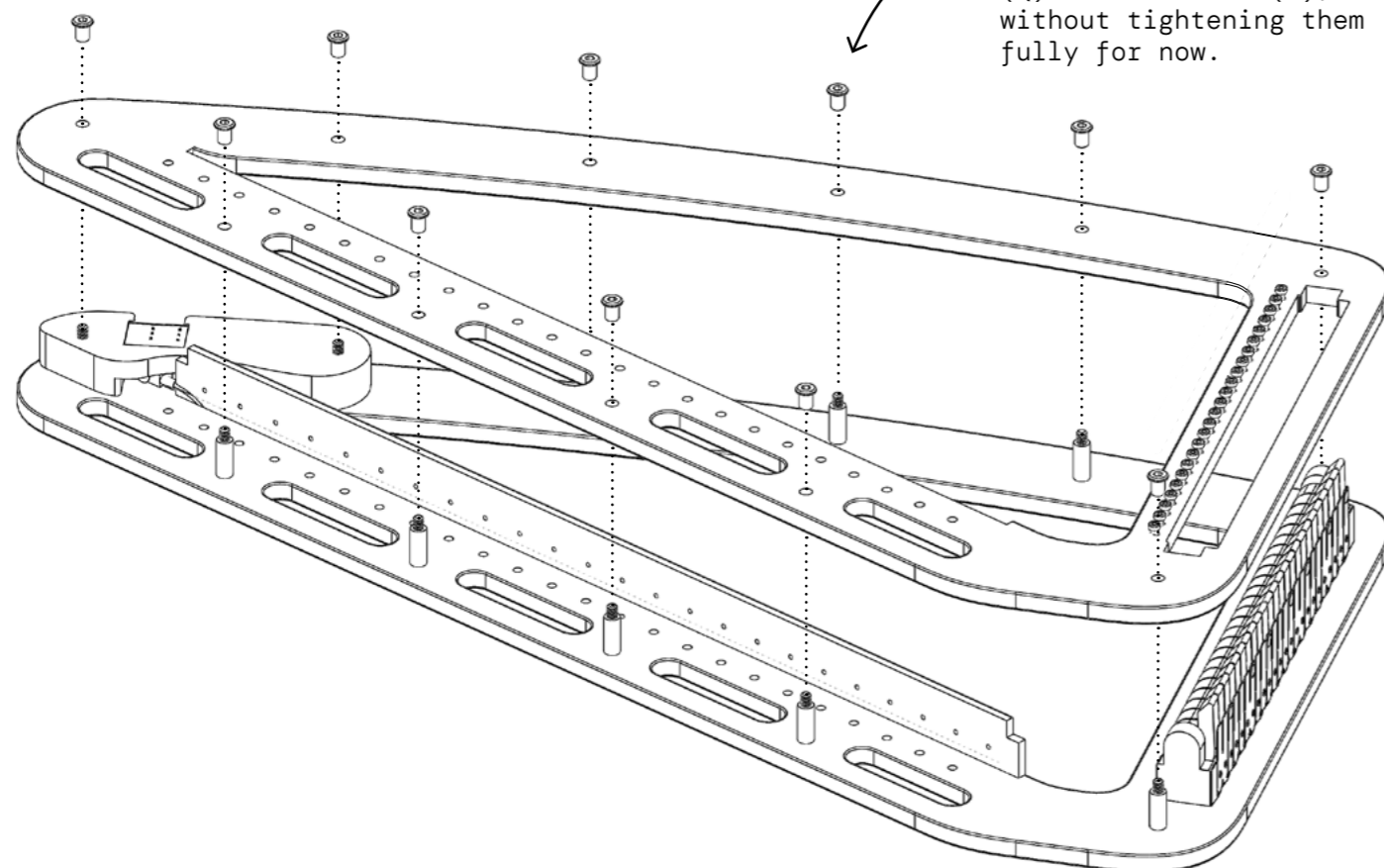
Cx01



To place the frame front (A) over the assembly, tilt it to get it over the Mechanism Sheet first (making sure levers are pointing up), then flatten it.



Insert the sleeve nuts (Q) on each bolt (R), without tightening them fully for now.

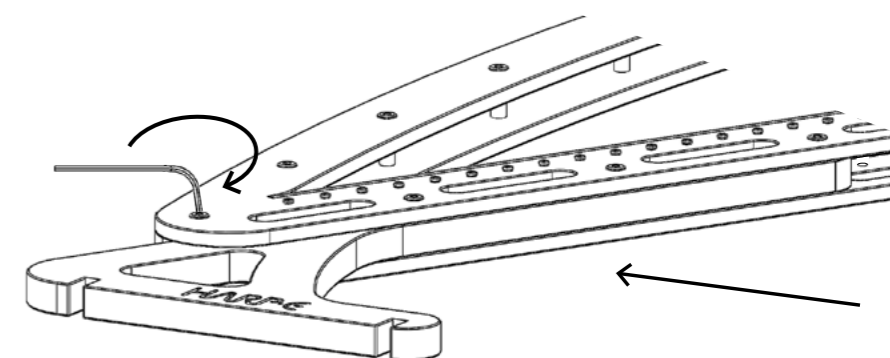
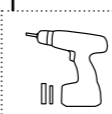


Insert the stand (C) between the frames, to ensure it fits, then tighten the bolts. Make sure to not over tighten, only tighten enough so nothing is rattling.

Check that the stand can go in and out easily.

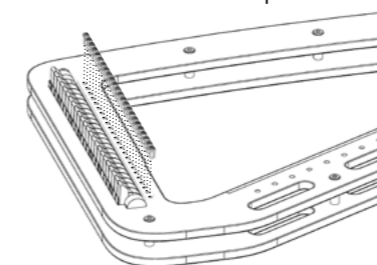
### Tip

You can also use an electric screwdriver to speed up the process.

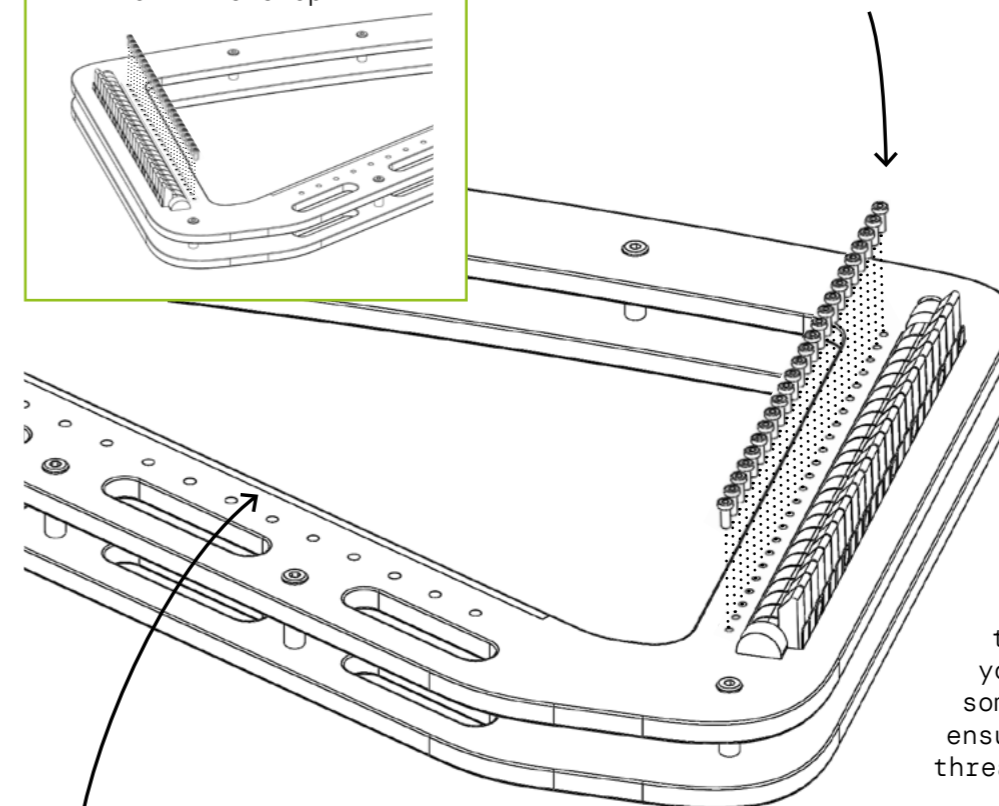


### LEFT-HANDED HARP

Mirror this step:



Insert all the regulator bolts (O). don't have to go all the way in, as we will adjust them after stringing.



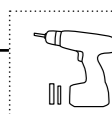
If you are using the regulating key (T), hold the bolt (O) in place with your other hand and use some force to screw them in, ensuring the bolts create a thread in the wood.

### Tip

If your soundboard is not staying in its slot, do not worry: the string tension will hold it. For now if it bothers you, you can fix it with a bit of tape.

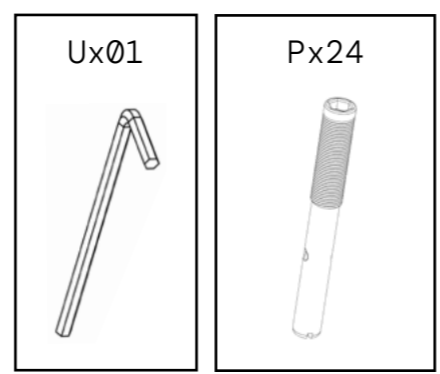
### Tip

You can also use an electric screwdriver to speed up the process. Use the lowest speed to avoid chipping the wood.



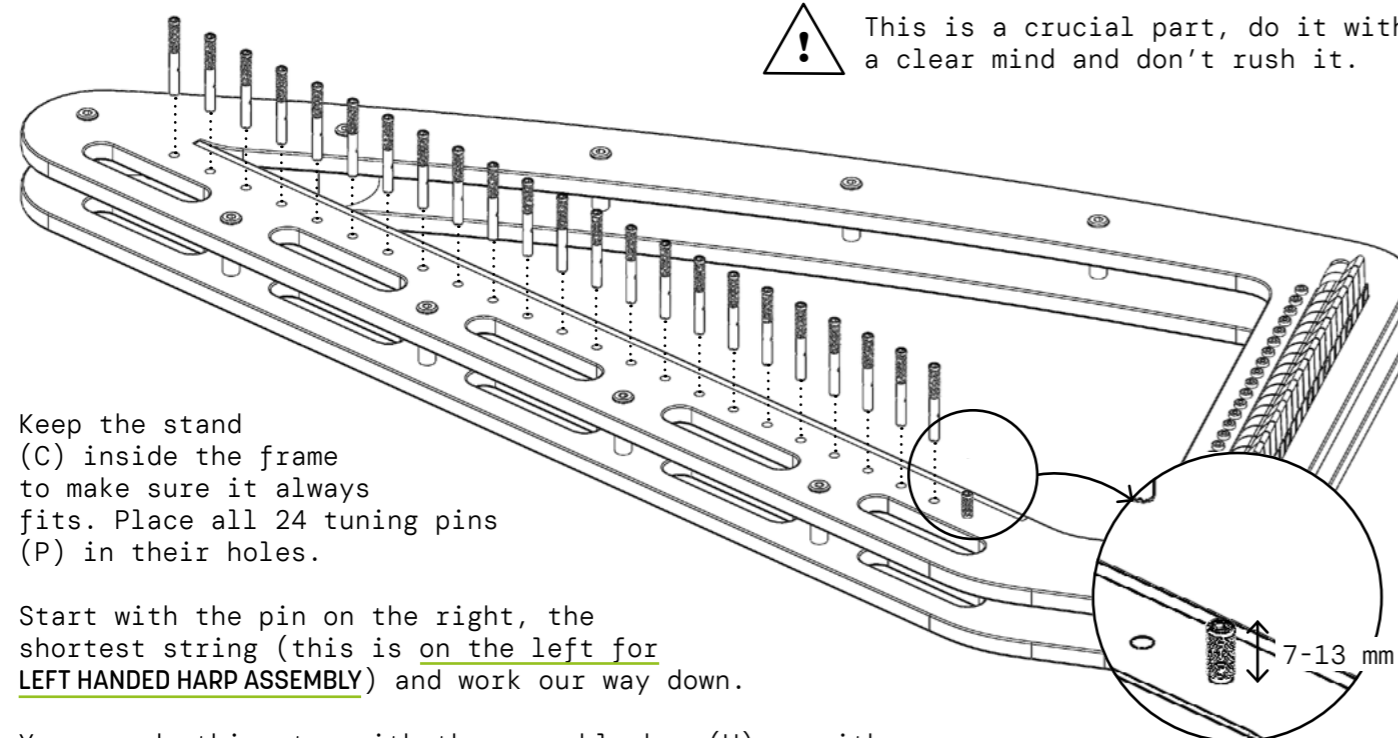
# 7

## TUNING PINS



In this step we create a thread in the wood by pushing and turning the tuning pins (P). The aim is to get the right amount of friction so they hold strings in tension while being easy to turn when tuning. Start very slowly, you will develop a feeling for it.

! This is a crucial part, do it with a clear mind and don't rush it.



Keep the stand (C) inside the frame to make sure it always fits. Place all 24 tuning pins (P) in their holes.

Start with the pin on the right, the shortest string (this is on the left for LEFT HANDED HARP ASSEMBLY) and work our way down.

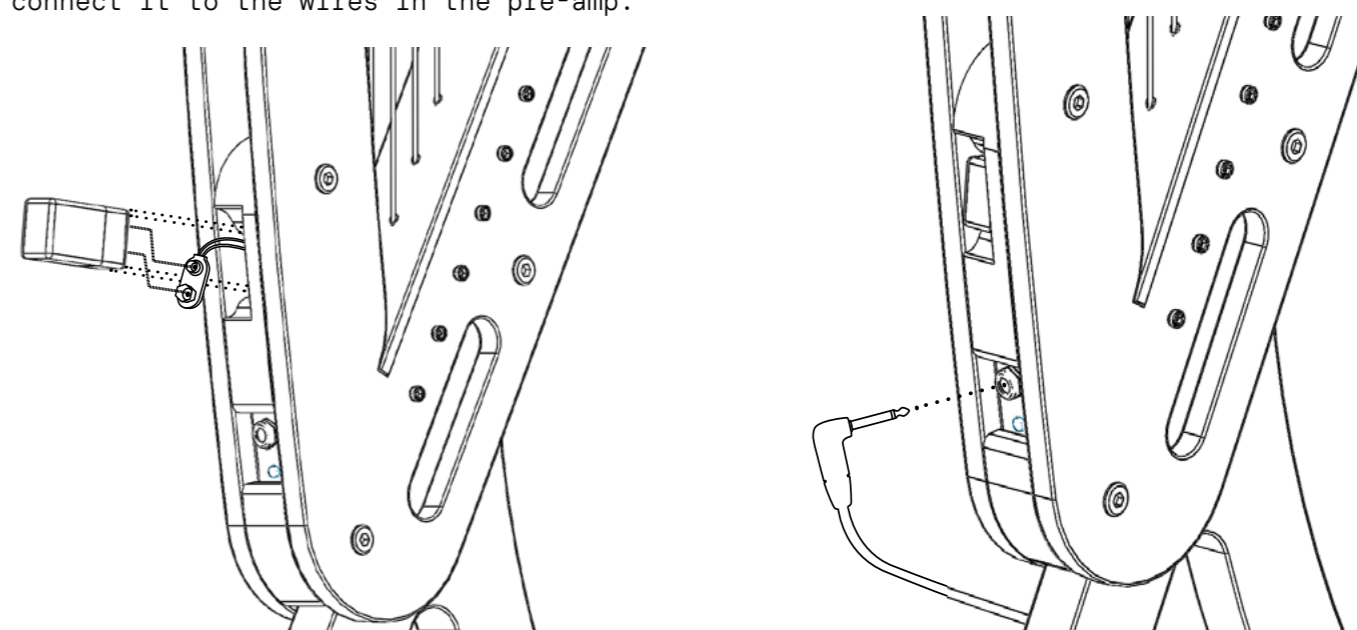
You can do this step with the assembly key (U) or with an electric tool. Even if you're planning to use the electric screwdriver, do the first one by hand to get a feel for things. Take your assembly key and rotate the pin clockwise while applying pressure. The pressure is important for the thread to catch the wood properly. Applying too little pressure will turn the pin into a drill enlarging the hole. Any sawdust appearing would be a warning sign to apply much more pressure. Screw the tuning pins in just enough so the rounded tip just about reaches the hole in the frame back. As the pin goes in deeper, friction will increase. The head of the pin should not go all the way in, but stick out something between 7-13mm from the frame front. They will go in further later when you string the harp. The friction you feel should be enough to hold the string, but not require too much force to tune.

For your next pins you can use the electric screwdriver. Make sure again to apply good pressure, go very slowly and make sure to not wobble, as that might enlarge the holes, which will be very hard to remedy. Do the last millimetres by hand, to get the right friction. If there is too much friction, you can unscrew it until it's smooth or even unscrew it completely and try again. They don't need to all stick out by the same amount, as long as the tips all reach the other frame half and the friction feels similar for all.

Align the holes in the tuning pins with the holes in the soundboard for when you string your harp later. This is also a good last check on whether they all feel right.

A last test: take the battery and connect it to the wires in the pre-amp.

Plug in an angled mono jack.



The battery indicator light should flash white to indicate a full battery and then keep flashing every couple of seconds. Amber light means the battery is nearing empty and red means it's time to change the battery.

If you've connected the harp to an amp, you should be able to hear a noise when tapping the harp.

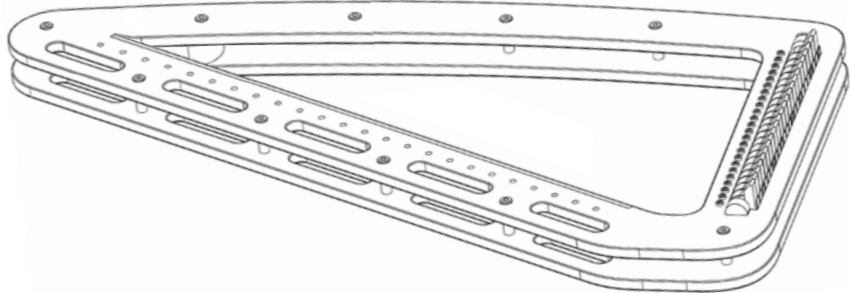
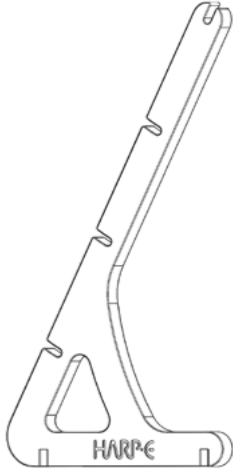

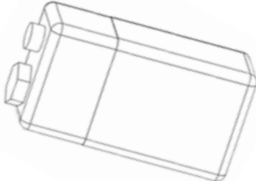




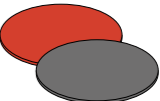

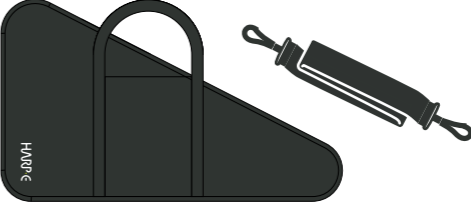
**CONGRATULATIONS, WE ARE DONE WITH THE ASSEMBLY!**

Take a well-deserved break, then you can move on to stringing, tuning and regulating.

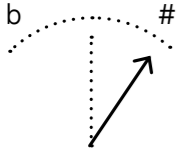
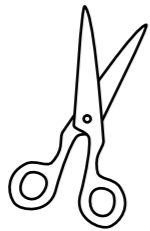
# STRING & GO PACKAGE

Stringing, tuning and regulating

# THIS KIT CONTAINS

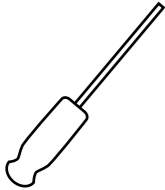
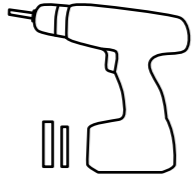

A	Pre-Assembled Harp•E	x01	C	Stand	x01
					
			D	Feet	x02
					
K	Battery	x01	L	Strings	x24
					
			T	Regulator Key	x01
					
U	Assembly & Tuning Keys	x02	V	Eyelets	x24
					
			W	Red & Black Stickers	x14
					
Y	Silicone Stickers	x04	Bag, Strap, Strap Buckles		
					

# ADDITIONAL TOOLS

Tuner	x01	Scissors	x01
			

→ You can simply download a tuner app on your phone.

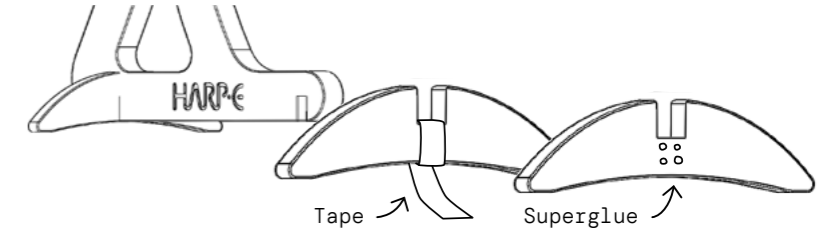
## OPTIONAL TOOLS TO SPEED-UP THE PROCESS

Thin screwdriver	x01	Electric screwdriver	x01	Sellotape	x01
		 <p>with M3 and M4 hex bits</p>			

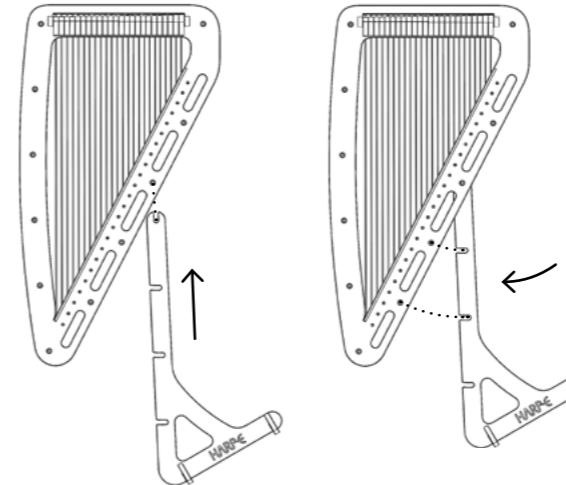
# PRELIMINARY STEPS

- Check that you have all the correct parts in correct quantities.
- If there is a bit of tape on the sensor, it's simply to keep it in place while it's not strung yet. Leave it for now and remove it once you've strung the harp.
- Check that the feet fit well in the stand: tight enough so that they don't fall out when you lift the harp.

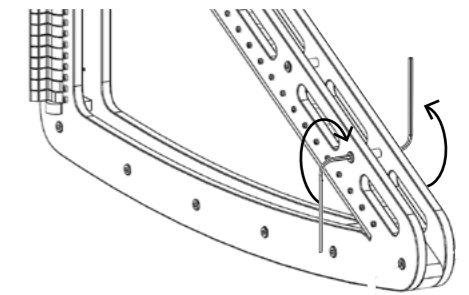
→ If they don't: thicken the part with a few drops of superglue (let it dry thoroughly) or with some tape.



- Check that the stand fits well in the frame: not too tight but tight enough so that it doesn't fall out when you lift the harp. Try it in different heights.



→ If it doesn't: tighten or loosen the bolts around the frame.

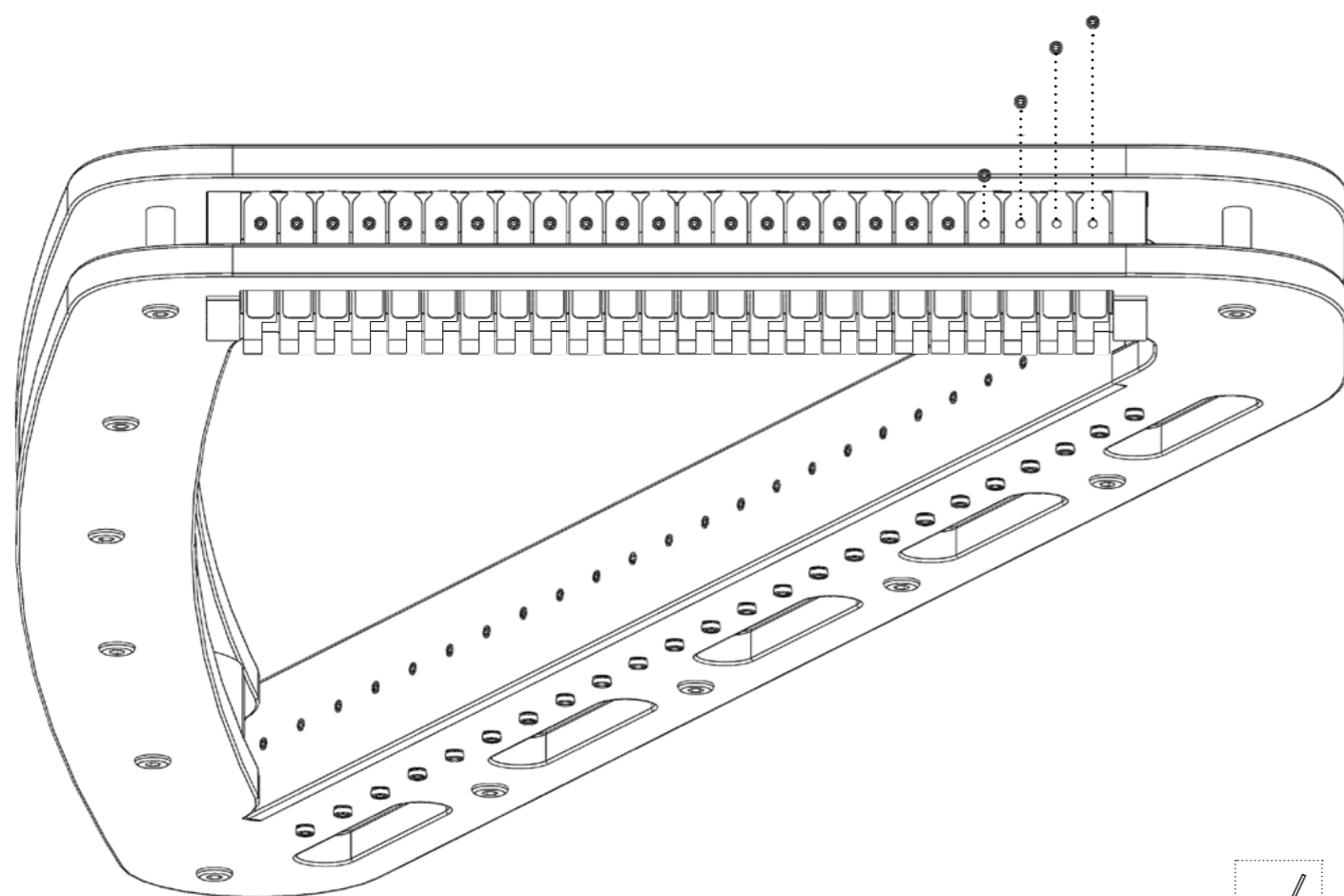


- Check that the tuning pins turn smoothly without being too loose.
- Screw in the tuning pins that have too little resistance, and screw out the pins that have too much resistance. You should have more resistance in the lower tuning pins, because they will need more friction to hold thicker strings in tension.
- Align the holes of the tuning pins with the holes in the soundboard, this will make threading the strings through easier.
- By running your fingers on the wood, you can check if everything is smooth and remove any splinters. You can also use a little sanding paper on some rough spots if needed.
- Take the eyelets and assembly keys out of their plastic bag and if they are greasy, wipe them with a piece of tissue.

# 1

## EYELETS

Vx24



### Tip

If you have one, using a thin screwdriver is helpful to place and push eyelets in. Keeping the levers up also helps pushing.



# 2

## STRINGS

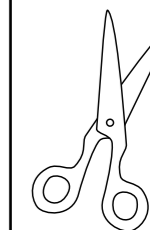
Lx24



Ux02



Scissors

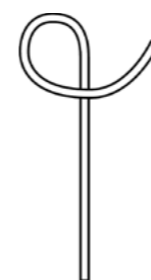


Start with the lower, thicker strings. The lowest is n°24 (red). Make the knots as small and close to the end of the string as possible, to leave a maximum of length to reuse in case of breakage.

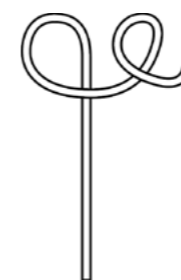
### Tip

It can help to practice with something bigger like a charging cable, rope...

### KNOT 1 for thick strings



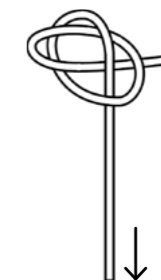
1. Make a big loop



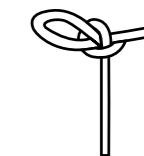
2. Make a smaller loop



3. Insert the small loop into the big loop



4. Pull the string around the small loop

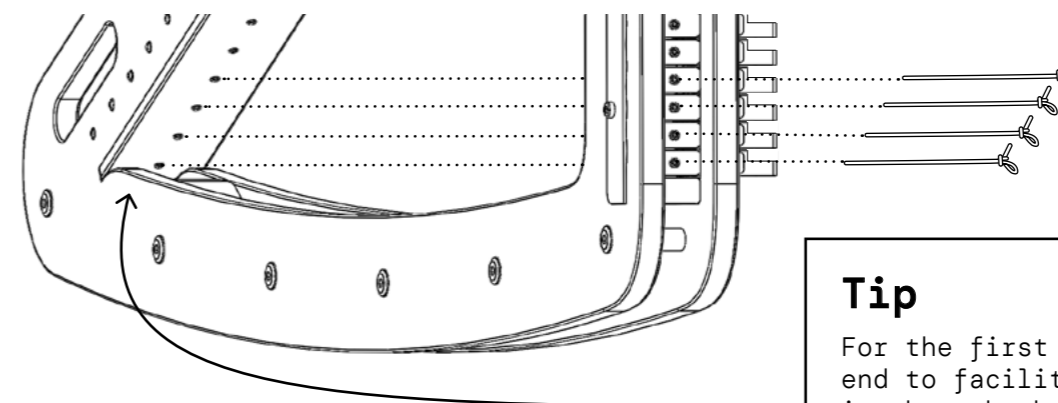


5. Pull tight to close the knot

Thread the string you just knotted through the appropriate eyelet (V) in the metal sheet (I).

Pull pull the string to stretch it while tightening the knot. Then thread it through the eyelet in the soundboard (H) and the hole in the tuning pin (P), and stretch it more.

Secure the string by turning the pin clockwise with the tuning key (U), while holding the string's end.



Keep the string sticky labels. You can slide them off for now, you will slide them back on later.

### Tip

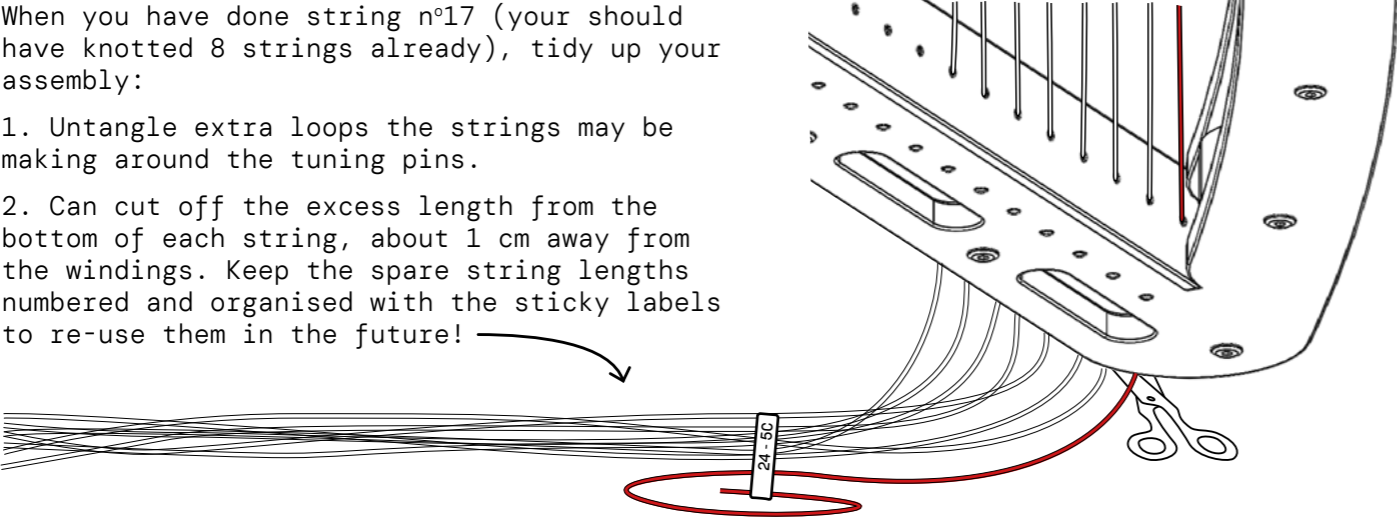
For the first string, bend the end to facilitate threading it through the soundboard.



Be careful when stretching the strings.

When you have done string n°17 (your should have knotted 8 strings already), tidy up your assembly:

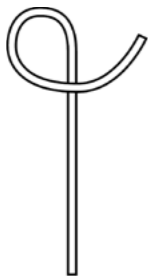
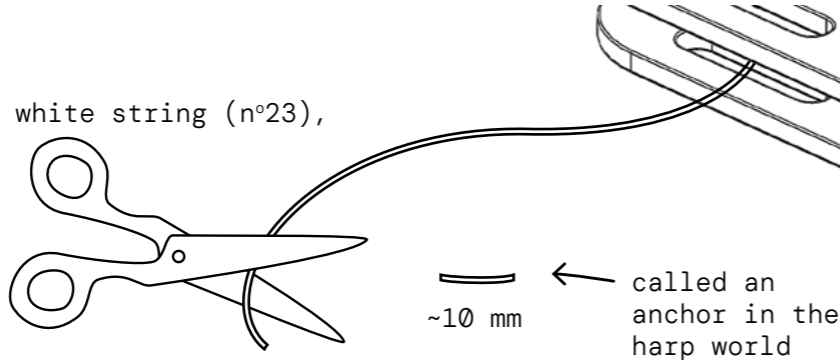
1. Untangle extra loops the strings may be making around the tuning pins.
2. Can cut off the excess length from the bottom of each string, about 1 cm away from the windings. Keep the spare string lengths numbered and organised with the sticky labels to re-use them in the future!



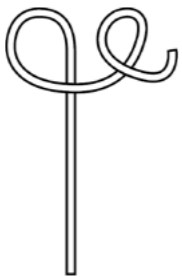
Now, from string 16 and below, the strings are too thin to continue with knot 1, so switch to knot 2.

## KNOT 2 for thin strings

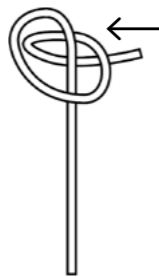
From the excess of the lowest white string (n°23), cut 16 bits of ~10 mm



1. Make a big loop



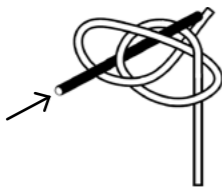
2. Make a smaller loop



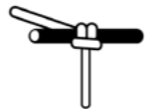
3. Insert the small loop into the big loop



4. Pull the string around the small loop

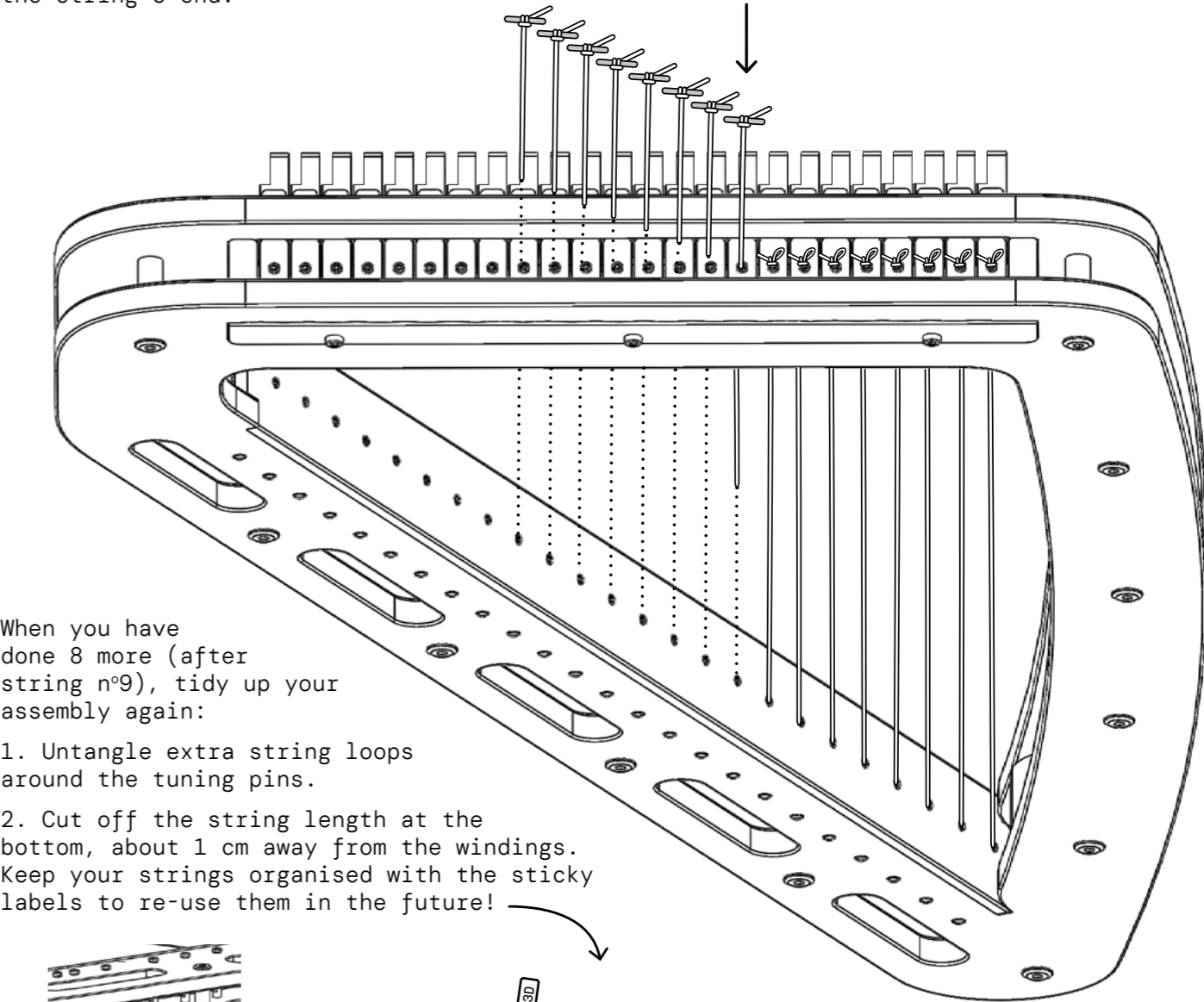


5. Take a piece of the string cut before, and insert it through the two loops as shown.



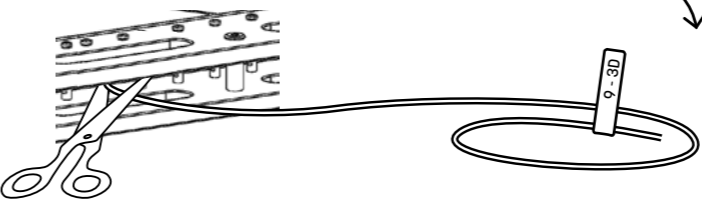
6. Pull tight to close the knot.

Repeat knot 2 on the next 8 strings, thread each one through the appropriate eyelet (V) in the metal sheet (I), and pull to stretch the string and tighten the knot. Then thread it through the soundboard and tuning pin, and pull it again to stretch the string again. Secure it by turning the pin clockwise with the tuning key, while holding the string's end.



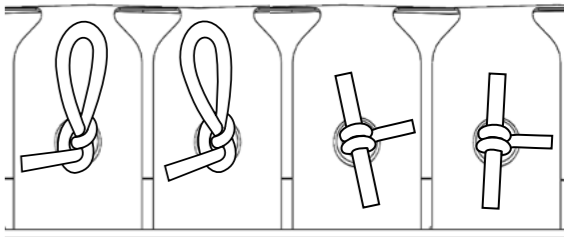
When you have done 8 more (after string n°9), tidy up your assembly again:

1. Untangle extra string loops around the tuning pins.
2. Cut off the string length at the bottom, about 1 cm away from the windings. Keep your strings organised with the sticky labels to re-use them in the future!



Finally, repeat this process for the last 8 strings: knot 2, thread and stretch, then secure each string, and tidy up your assembly.

Now tidy up the top of the strings as well: Make sure that the knots and anchors are pointing in the same direction, so that no strings touch each other, neighbouring keys or the frame, to avoid buzzes. If some string tails are too long, cut them.



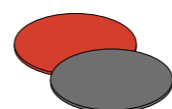
# 3

## STICKERS & BATTERY

Kx01



Wx14

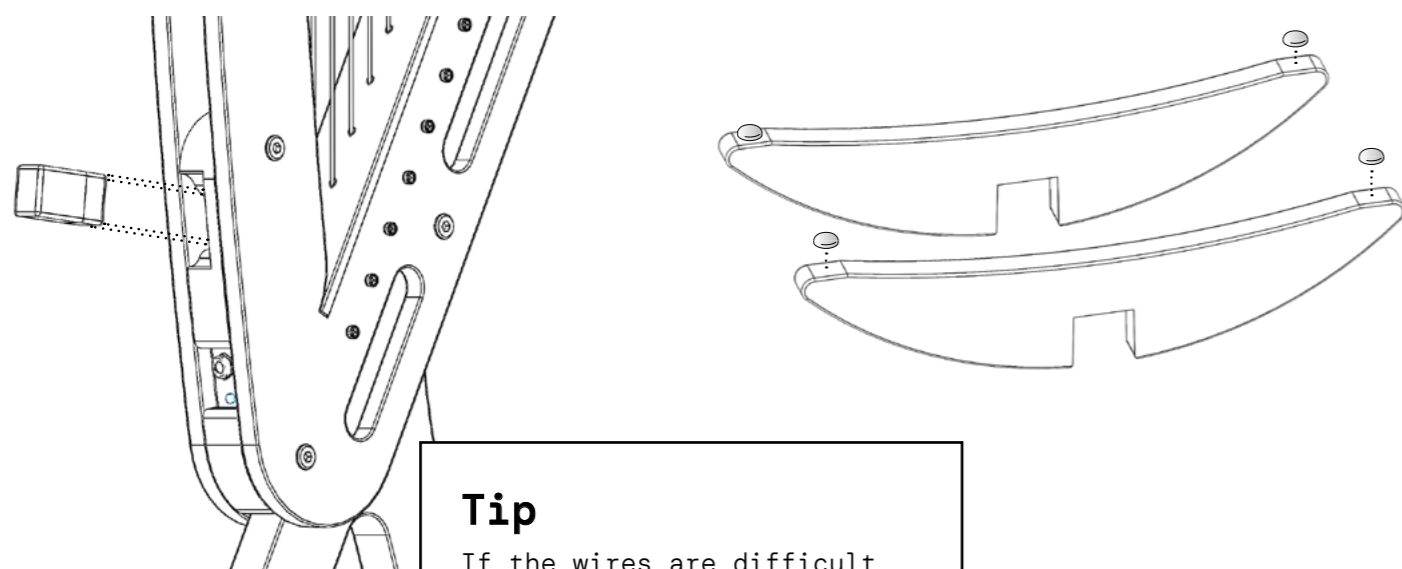


Yx04



Connect the battery to the wire and insert it.

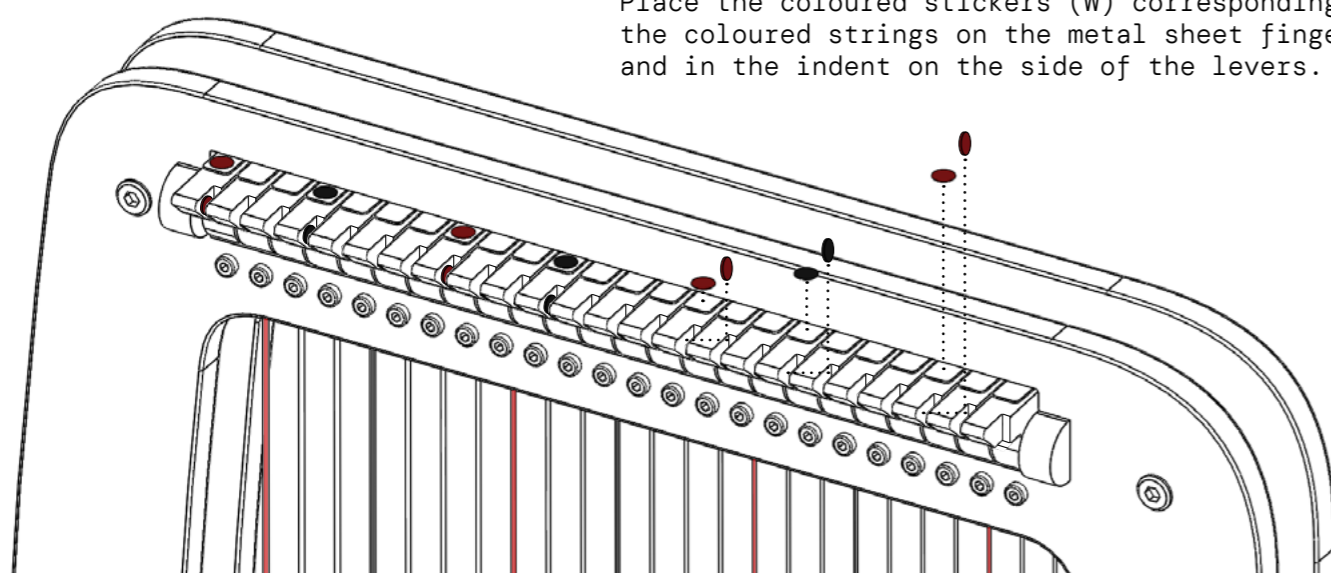
Place the silicone stickers (Y) at the bottom of the feet, to isolate the harp from vibrations in the floor.



### Tip

If the wires are difficult to grab, use the assembly or regulator key to pull them.

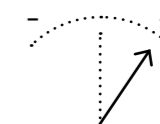
Place the coloured stickers (W) corresponding to the coloured strings on the metal sheet fingers and in the indent on the side of the levers.



# 4

## TUNE SHARP

Tuner



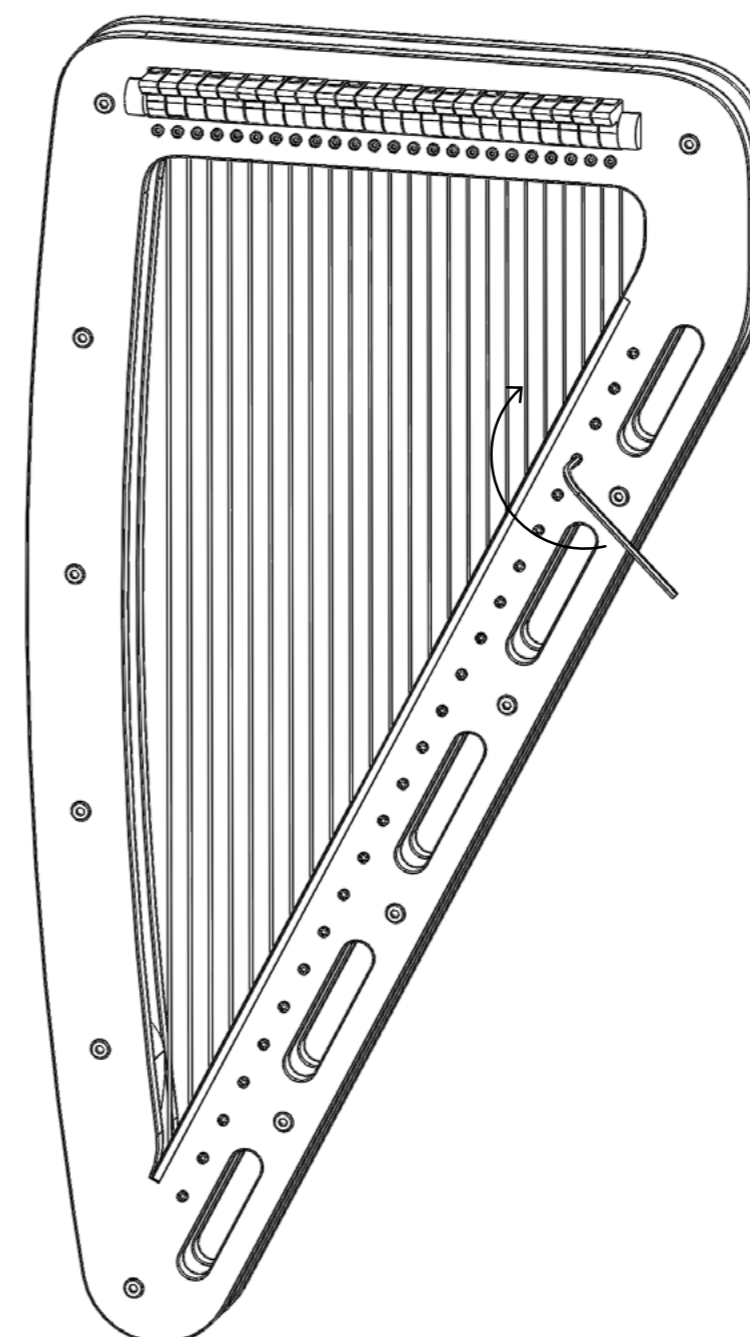
Ux01



### Tip

There are free tuner apps for smartphones.

Start with all the levers up and tune each string by delicately turning the tuning pin (P) with a tuning key (U).



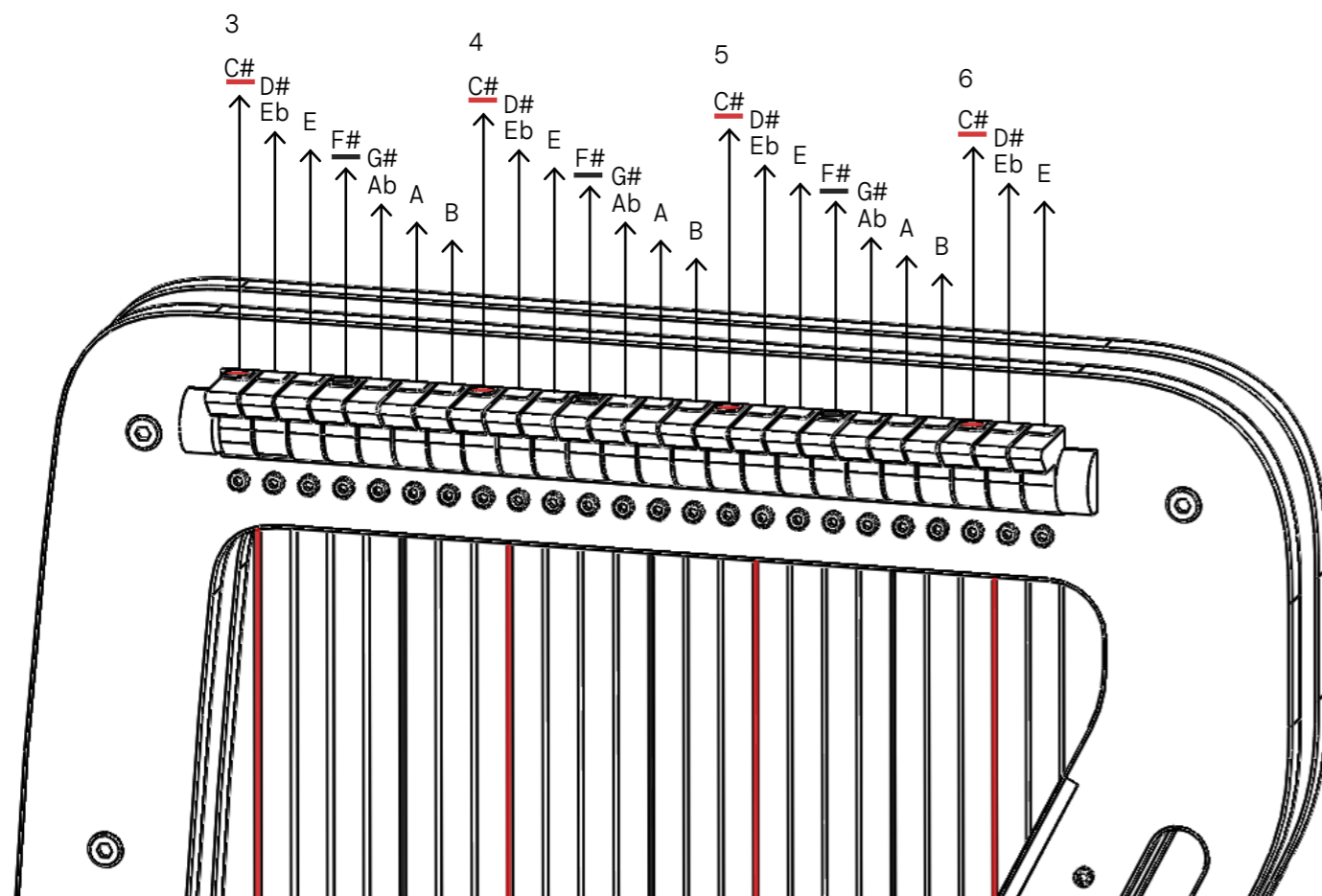
In a quiet environment, place your tuner close to the strings, pluck a string and see what the tuner shows: it will likely be showing a pitch too low. See what the right key should be for each string on the next page.

→ Turning the pin (P) **clockwise** will tense the string, which will make the **pitch higher**.

→ Turning the pin (P) **counter-clockwise** will release the string, which will make the **pitch lower**.

Continue plucking the string and turning the pin until the tuner shows the right key.

We recommend tuning the harp in E major (which is the same as C# minor):



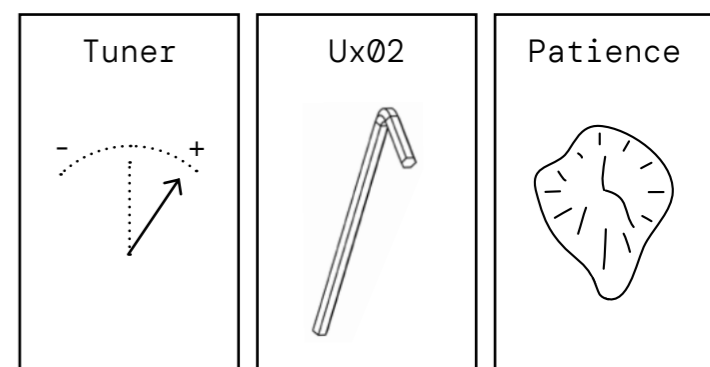
## Note

- Musical notation is not a very standardised thing unfortunately. For string n°23, your tuner app might for instance depict the correct note as either Eb or D# - they are exactly the same thing. Same counts for G# and Ab, they are the same note, written in different ways.
- Also, the numbering of octaves is a bit obscure for harps. If you were to order new strings for a harp, you'll look at the string table for harps (see our website for the Harp-E string table, running from 5C to 2E, Sipario Silkgut Strings [🔗](#)). Tuners however, are usually designed for more common instruments than the harp, so that's what we'll use here. In that numbering the lowest string on the Harp•E is a C3 (C#3 with lever up) and the highest string is an E6 (Eb6 with lever down). The octave numbers in the image above refer to that more standardised numbering, so that it's most likely you can recognise the right octave on your tuner.
- This is a bit technical, but: if ever in doubt, your lowest red string with lever down should be tuned to 130.813Hz, when tuned at what is called "at 440Hz", meaning your A4 is tuned at 440Hz, which is currently the most standard way of tuning an instrument.

WELL DONE! YOU HAVE TUNED YOUR WHOLE HARP FOR THE FIRST TIME!

# 5

## REPEAT UNTIL STABLE



The harp will need several rounds of tuning, with the levers in sharp position (up) until the strings set. Repeat step 4 twice a day for about 10 days, until Harp•E is stable. The harp is considered stable once strings stop detuning within the same day. This will take some time. Only then you can move on to the next step.

## Tip (for pros only)

If you are very confident with feeling string tensile strength and want to accelerate the tuning process by a few days, you can overtune the harp, especially the lower strings, to stretch them faster. Overtune the lowest ~4 strings by 2 semitones, the rest of that octave and the next by 1 semitone, and the rest of the strings by maximum a quarter of a tone.

# 6

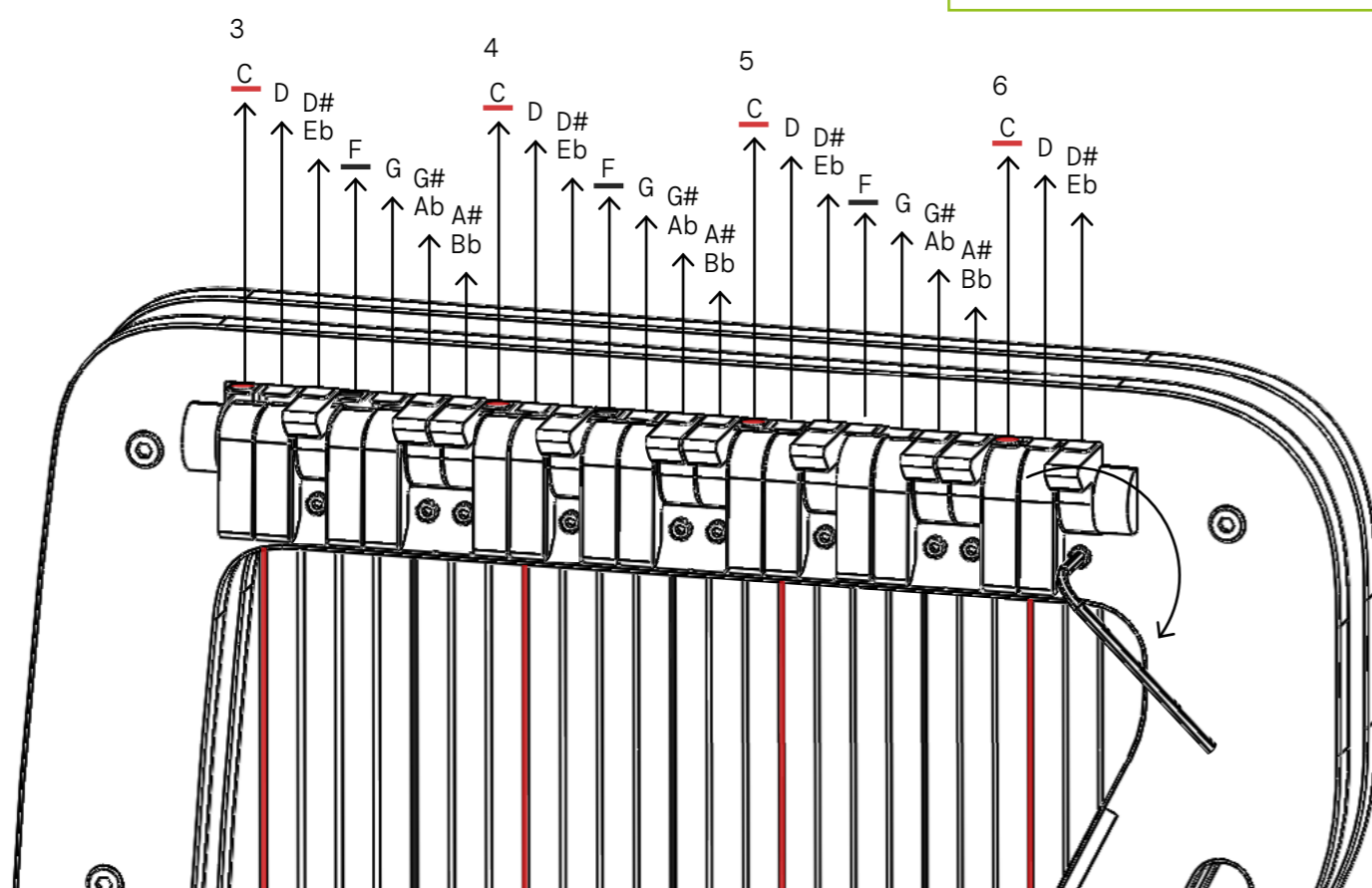
## ADJUST FLAT



Only do this once your harp is stable or you will have to do it again!

Put the levers in C major: from the left, 2 down, 1 up, 2 down, 2 up etc. as shown. Regulate the harp so that flipping a lever down makes the note one semitone lower, by moving the regulator bolts (O) inwards or outwards:

- Moving the bolt **outwards** will make the **pitch higher**.
- Moving the bolt **inwards** will make the **pitch lower**.



**PS:** the Harp•E lever system is different from traditional lever systems. Lowering a lever releases the string a little, lowering the tension and therefore lowering the pitch and vice versa. Traditional lever systems pinch the strings to shorten the vibrating part of the string in order to lower the pitch. The Harp•E mechanism can be re-regulated by yourself at any point in the future (without needing an engineer) and it allows for "sliding" notes and microtonalities.

CONGRATULATIONS! YOUR HARP•E IS NOW READY!

# 7

## TROUBLESHOOTERS

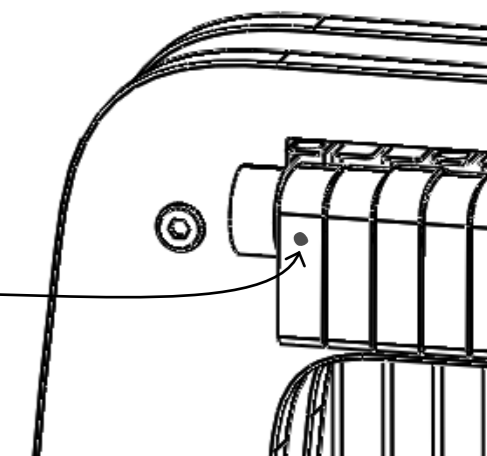
### IF YOU CANNOT REGULATE ONE OF THE LEVERS

Sometimes even with the screw all the way in, the string doesn't reach a full semitone lower.

1. In 90% of cases, this is because the wood has not fully settled yet. You can mark those levers and come back to regulating them a few days later.

2. It is ok to screw the regulator bolt a bit further down, into the wood.

3. If these haven't worked, there is still an easy fix: place a drop of superglue on this spot (then let it dry thoroughly before flipping the lever up) which will make the lever-up position slightly higher. You can tune this string again with the lever up, and then you should be able to regulate it perfectly with the lever down.

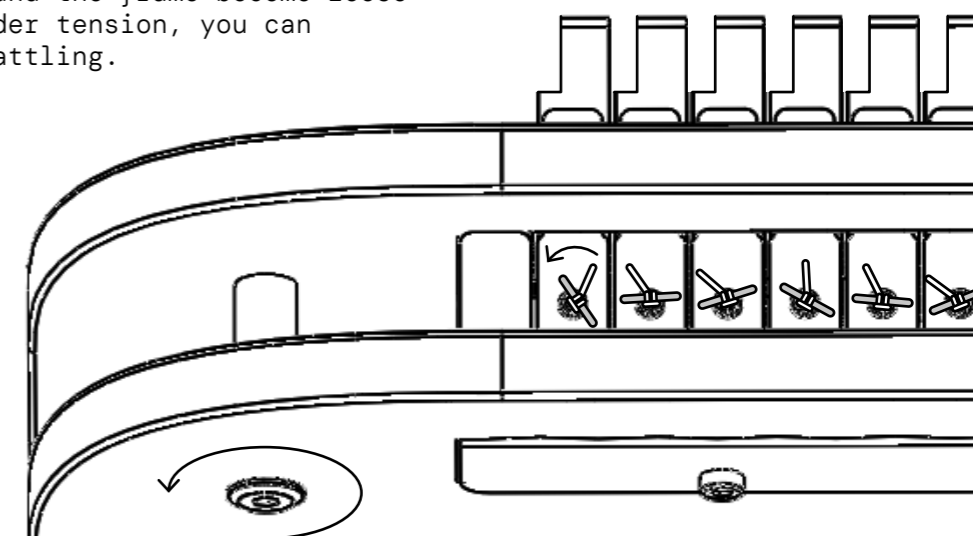


### FIXING BUZZING NOISES

First, make sure all string ends at the top and bottom are cut short enough so that they don't touch any parts.

If the nuts and bolts around the frame become loose after the wood deforms under tension, you can tighten them to prevent rattling.

Remaining buzzing noises will probably be caused by strings not sitting properly in the middle of the eyelets. You can simply move the string around in the eyelet to correct this.



## IF YOU FIND THAT A STRING REPEATEDLY BREAKS

Don't try to string it again and [contact us](#)  so we can investigate what is happening.

Breakage is normally not caused by a defect in the string but by the way it's been strung.



The first thing is to give time to your strings to stretch! Don't put too much tension on them too fast, let them ease into their fully tensioned state.

**If your string is breaking at the top:**

- It may be that you made the knot wrong, which could cause your string to sit in an awkward position that weakens it abnormally fast.

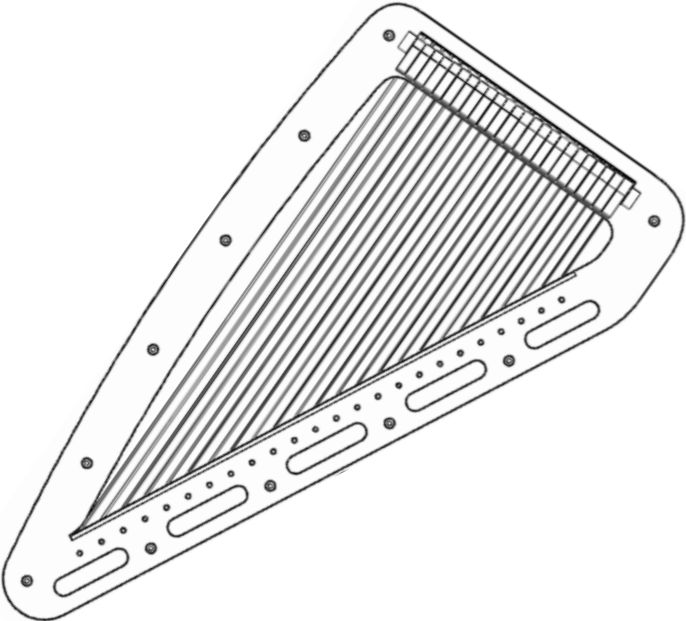
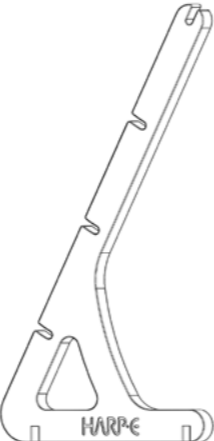






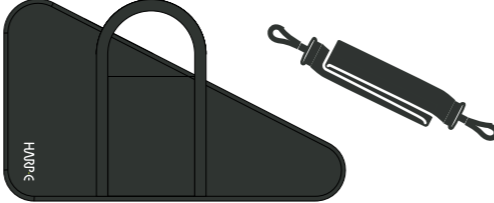
**If your string is breaking at the eyelet in the soundboard,** make sure your eyelet is properly put in straight all the way and not deformed inside the hole, as this could have created sharp edges inside the soundboard.

**If your string is breaking at the tuning pin,** this may be because of a defect in the tuning pin: check that the hole in which the string goes is rounded and not sharp. If it is sharp, send us a picture and we will send a replacement immediately.

## PLUG & PLAY PACKAGE

Final touches and using Harp•E


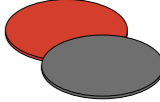
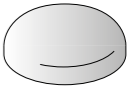
# THIS KIT CONTAINS

A Harp•E assembled, strung and tuned		x01	C Stand		x01
					
K Battery		x01	D Feet		x02
					
T Regulator Key		x01	U Assembly & Tuning Keys		x02
					
W Red & Black Stickers	x14	Y Silicone Stickers	x04	Bag, Strap, Strap Buckles	
					

→ In some packages the stickers have already been stuck on the harp for you.

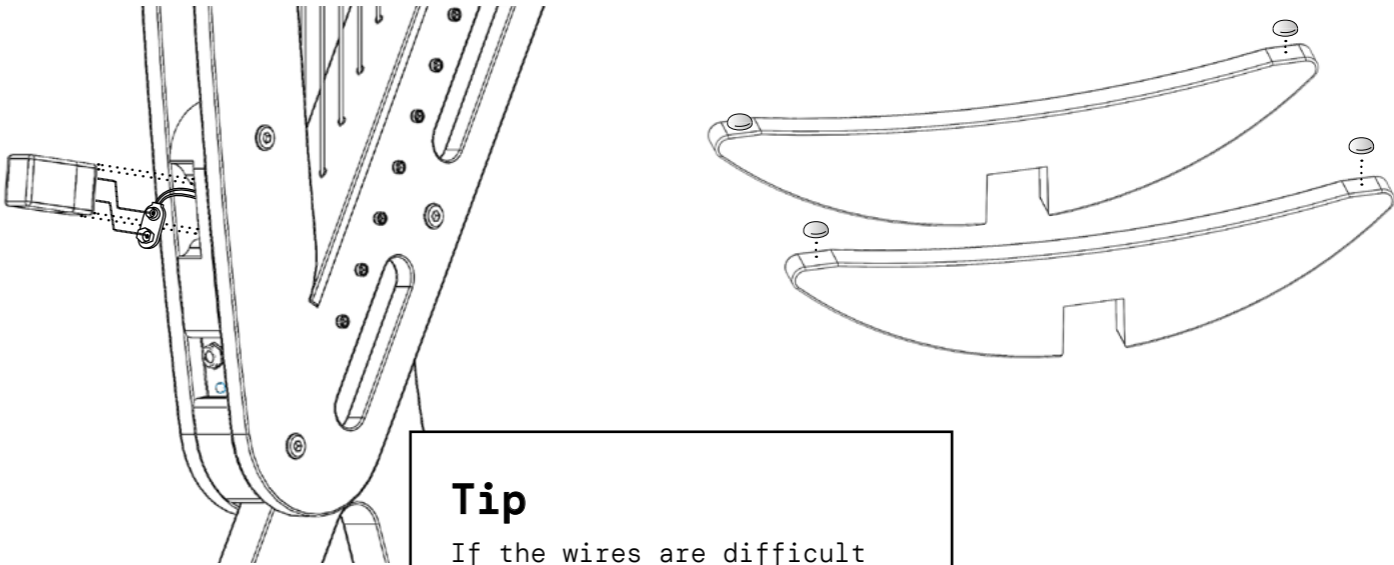
# 1

## STICKERS & BATTERY

Kx01	Wx14	Yx04
		

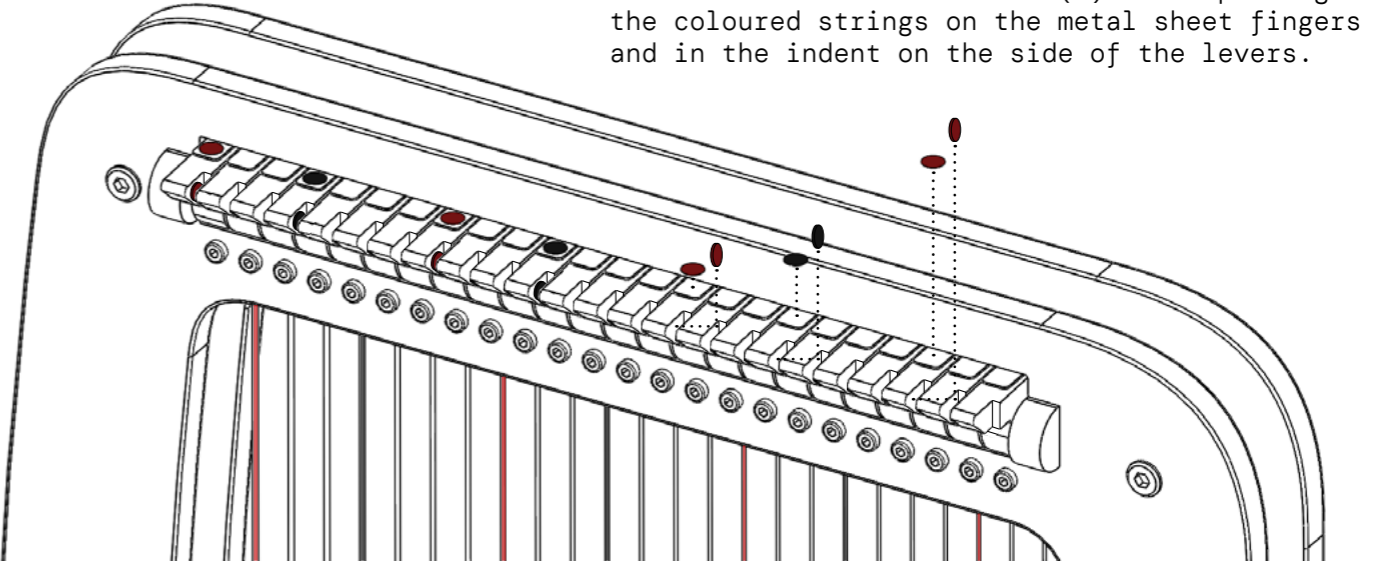
Connect the battery to the wire and insert it.

Place the silicone stickers (Y) at the bottom of the feet, to isolate the harp from vibrations in the floor.



**Tip**  
If the wires are difficult to grab, use the assembly or regulator key to pull them.

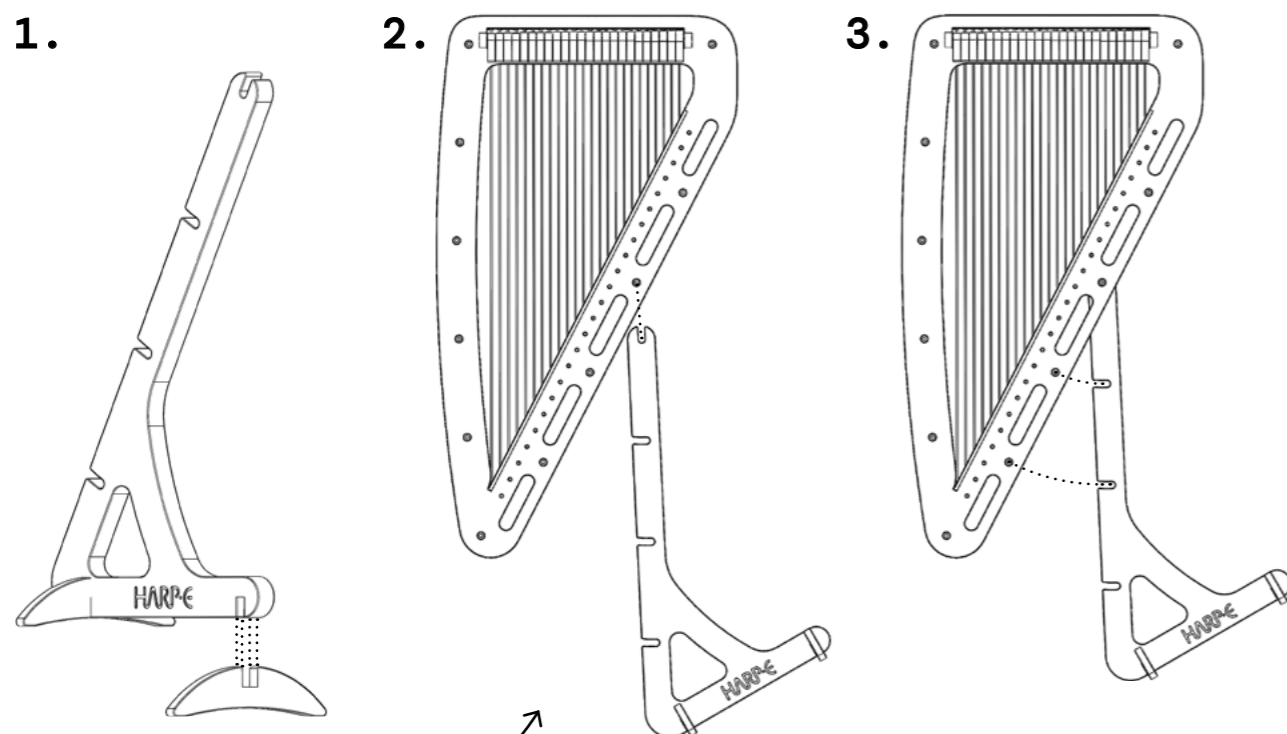
Place the coloured stickers (W) corresponding to the coloured strings on the metal sheet fingers and in the indent on the side of the levers.



# 2

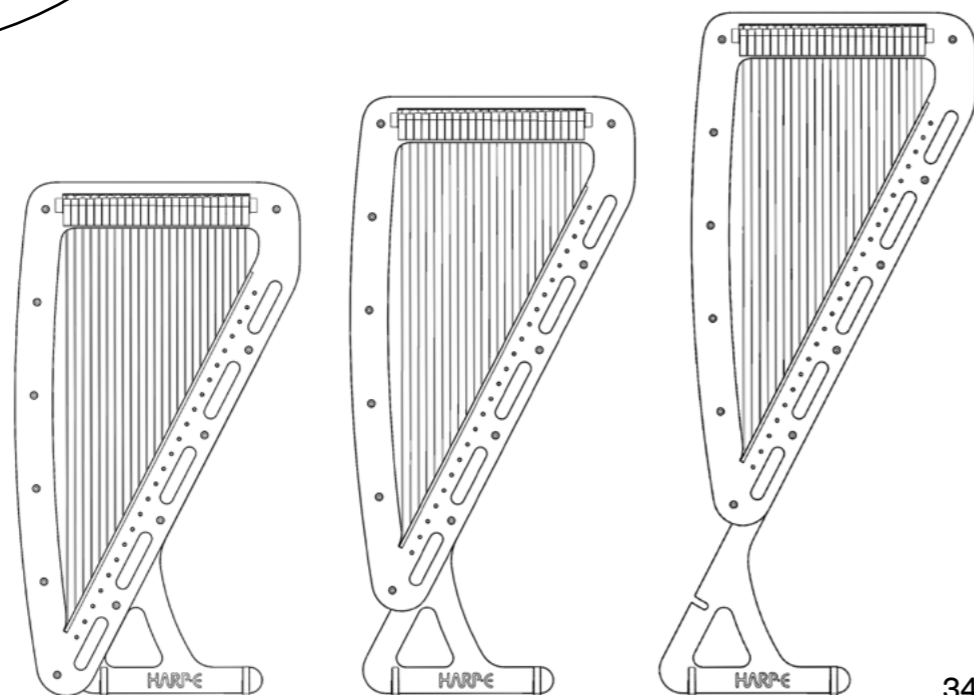
## USING HARP•E

### THE STAND



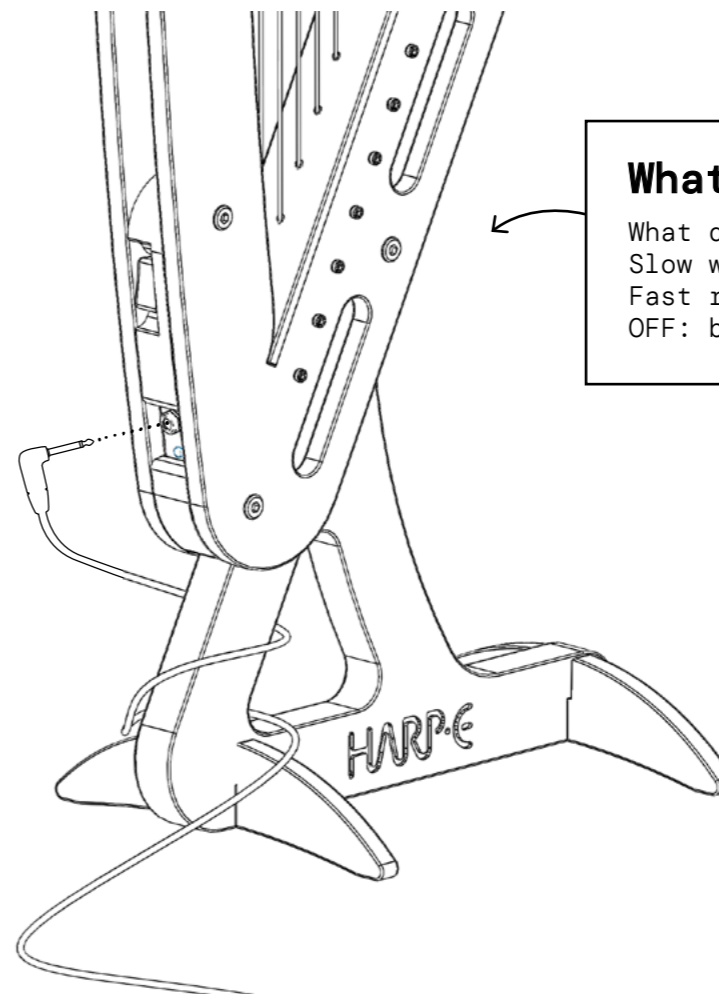
#### Tip

If the stand is too loose or too tight, adjust the bolts with the Assembly & Tuning Keys (U).



## AMPLIFICATION

Use a cable with a "mono jack" angled plug (6.35mm) to connect your Harp•E directly to an amplifier or to other devices (like a mixer or effects pedals). Inserting the plug will switch on the preamp unit inside the Harp•E. You do not need to remove the battery ever, only to replace it when it's empty. When Harp•E is unplugged, it automatically disconnects the battery, so the preamp is off and the battery does not drain. Unplug your Harp•E when you are not using it.



### What does the light mean?

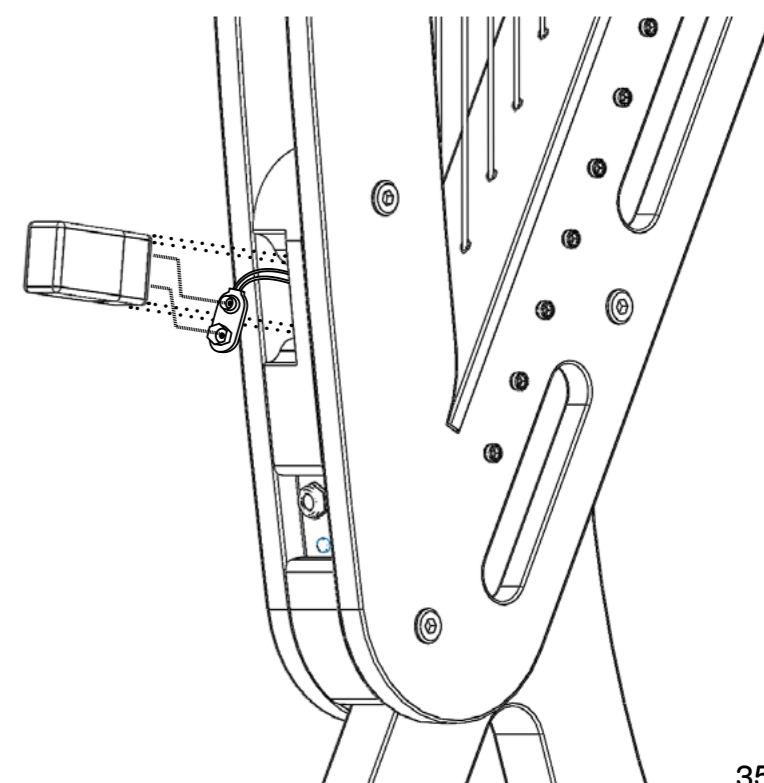
What does the light mean?  
Slow white blinking: good battery level  
Fast red blinking: battery is low  
OFF: battery is dead or disconnected

If you don't want the harp to flash every 5 seconds, you can toggle the electronics in and out of a mode that only shows the battery level once at switching on. You switch to and from this mode by inserting the plug 3 times in close succession, a green light will indicate mode change.

### Warning!

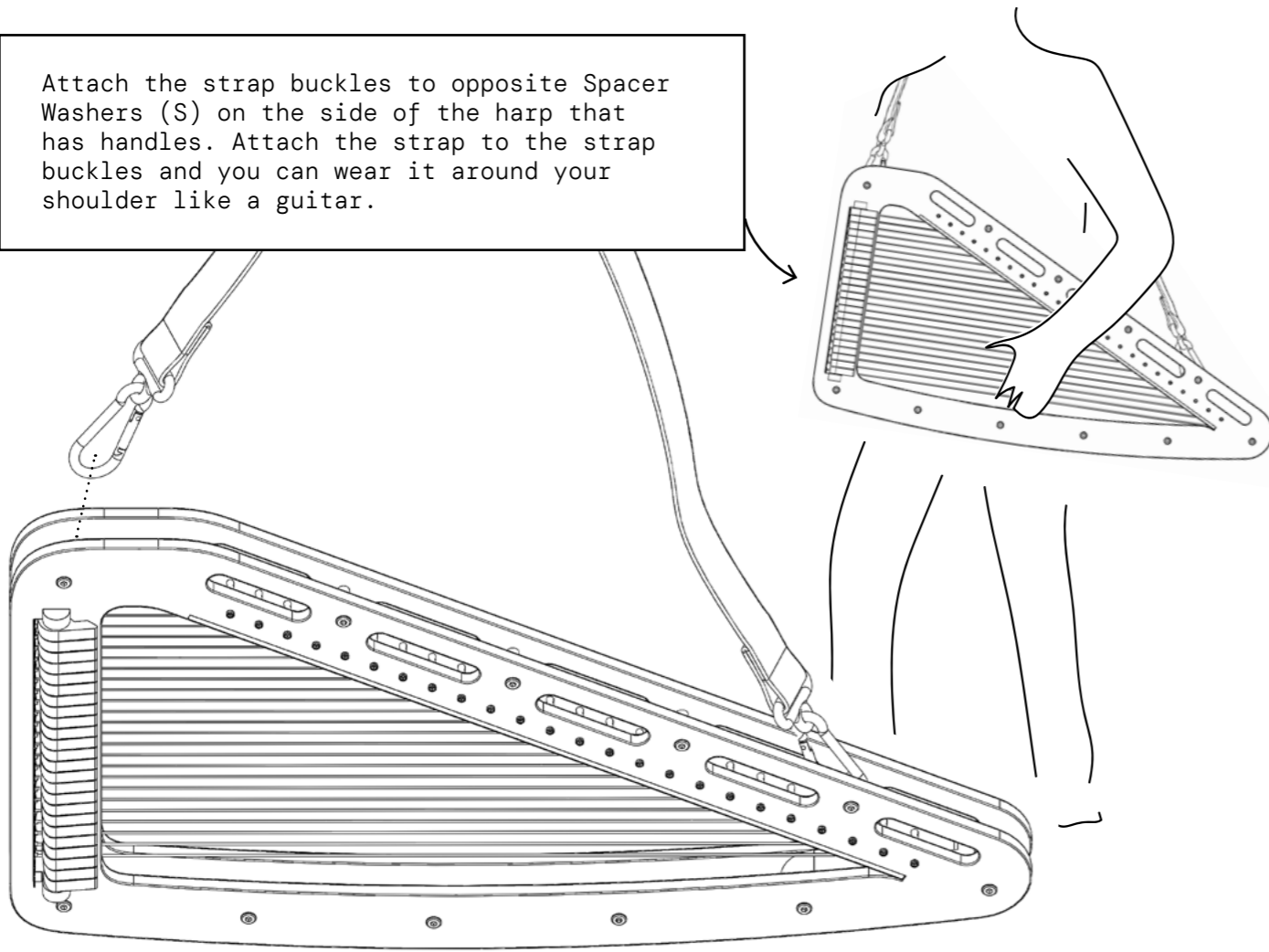
To avoid damage to the electronics inside the Harp•E when someone trips over your cable, make sure to loosely wrap the cable around the stand once.

### CHANGING THE BATTERY




## WEARING THE HARP-E STANDING

Attach the strap buckles to opposite Spacer Washers (S) on the side of the harp that has handles. Attach the strap to the strap buckles and you can wear it around your shoulder like a guitar.



You can also use the strap around your shoulder while sitting on a chair. You can wear your Harp-E upright in a more traditional way by wrapping the strap around the bottom of the harp while keeping the strap around your shoulder. You can also play standing up without a strap by putting your harp on the stand's lowest notch and on a table so that it is at standing height. You can see a demonstration of these in our "Playing positions" video tutorial.

### DO YOU WANT TO SHARE TIPS, TRICKS AND ADVICE WITH OTHER HARP•E-ISTS?

Join our [Harp•E community group on Facebook](#)  to share your top tips and hacks or ask the community for advice!