



Mayones Guitars & Basses

since 1982



Cali



Velvetrone
GENUINE MAYONES PICKUPS

**USER
MANUAL**

Dear Bass Player!

Mayones Cali is a very functional instrument. Apart from its incredible acoustic properties and playability, it also offers a professional tone - both when used with a typical bass amp, as well as in practice situations, thanks to its internal headphone amp. Cali mini bass is a professional instrument that can be placed on par with a regular bass. It may also be a highlight at live shows, during some brilliant solos, or in case of arrangements written specifically for its short scale.

The Cali bass features an embedded active three-band-EQ preamp that provides the player with a broad range of tone adjustments in the bass, mids, and treble areas. The push-pull volume knob in this model allows the user to bypass the preamp completely, thus making the instrument completely passive.

If you are looking for something more sophisticated, then we have prepared the **Cali VFret** model that has a varied scale for each of the strings and fanned frets (17.1" - 18.3" multiscale), a tilted pick-up and bridge comprising out of individual modules for each of the strings.

Note:

The present instruction manual constitutes an addendum to the basic version of the Mayones Electric Bass Manual. The manual you are holding complements the basic manual within the scope of the specific design and usability features of the Cali bass. The aforesaid instruction manual can be downloaded from the www.mayones.com website.



IMPORTANT SAFETY NOTICE

**LISTENING TO THE SOUND AT LOUD VOLUMES MAY LEAD TO
A PERMANENT HEARING DAMAGE.
THE VOLUME SHOULD ALWAYS BE SET TO THE LOWEST USABLE LEVEL.**

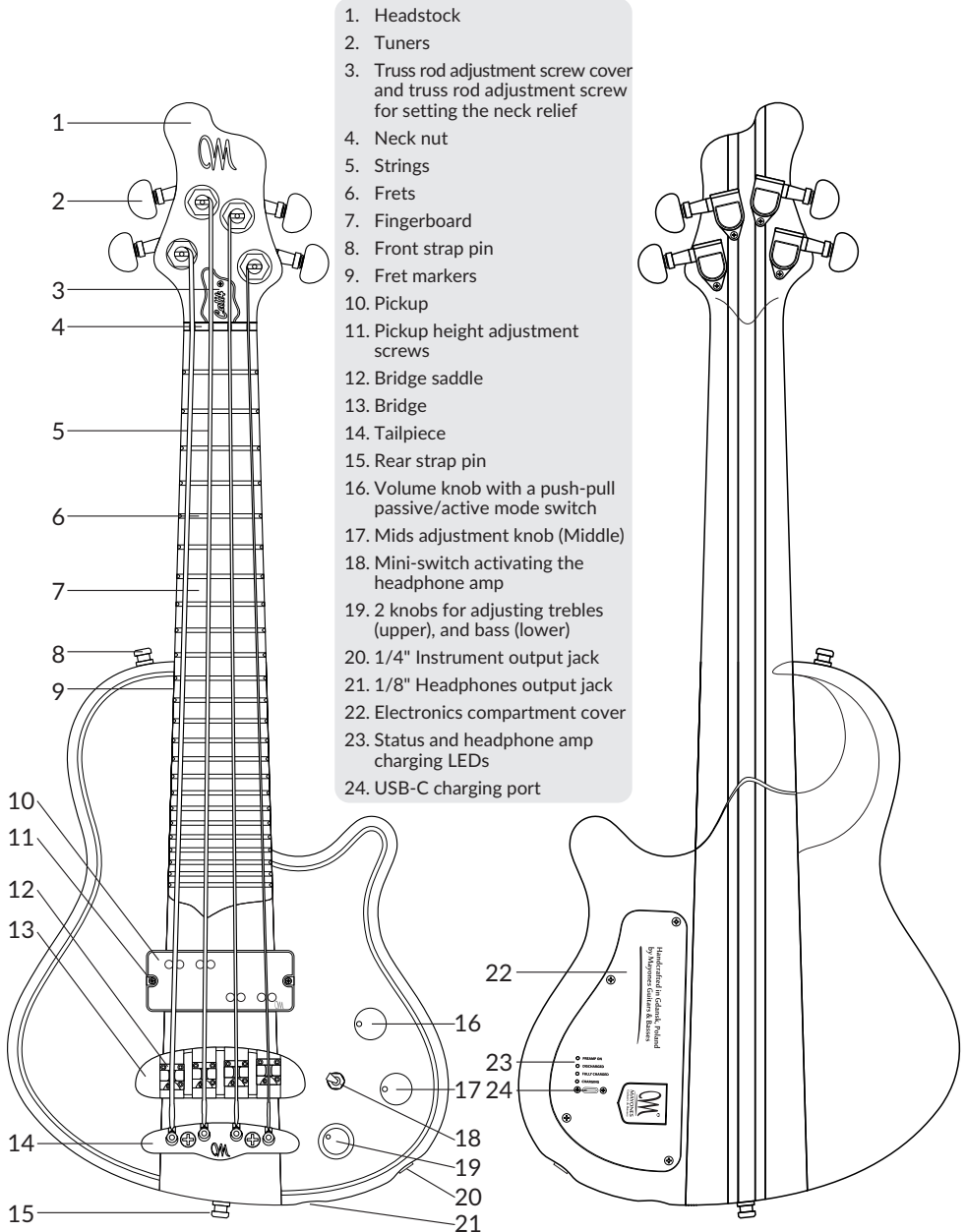
Exposure to loud sounds over a long period may lead to hearing damage and permanent hearing impairment. According to the general recommendations, we'd like to ask you to follow the values listed below, when it comes to maximum time one may spend in locations with a specific sound level. Following those recommendations is not expected to result in hearing damage.

- 90 dB SPL - Up to 8 hours
- 95 dB SPL - Up to 4 hours
- 100 dB SPL - Up to 2 hours
- 105 dB SPL - Up to 1 hour
- 110 dB SPL - Up to 30 minutes
- 115 dB SPL - Up to 15 minutes
- **120 dB SPL – avoid levels so high, risk of loss of hearing occurs**

IMPORTANT!

Be especially careful when using earphones or headphones plugged into the instrument, as sounds of very high volume may appear and these could lead to permanent hearing damage.

Elements of the Cali bass



1. Headstock
2. Tuners
3. Truss rod adjustment screw cover and truss rod adjustment screw for setting the neck relief
4. Neck nut
5. Strings
6. Frets
7. Fingerboard
8. Front strap pin
9. Fret markers
10. Pickup
11. Pickup height adjustment screws
12. Bridge saddle
13. Bridge
14. Tailpiece
15. Rear strap pin
16. Volume knob with a push-pull passive/active mode switch
17. Mids adjustment knob (Middle)
18. Mini-switch activating the headphone amp
19. 2 knobs for adjusting trebles (upper), and bass (lower)
20. 1/4" Instrument output jack
21. 1/8" Headphones output jack
22. Electronics compartment cover
23. Status and headphone amp charging LEDs
24. USB-C charging port

General Information on Using the Instrument

Most of the set-up procedures applicable to the Cali bass are the same or very similar to conventional bass guitars. The above stems from the use of full-size components, identical to the ones used in other Mayones basses. This provides you with the very same Mayones signature sound that comes together with top quality, perfect playability, a broad range of set-up adjustments, reliability, and longevity of both the instruments, as well as of its components.

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Strings

Cali 4 is tuned one octave higher than a typical 4-strings bass guitar (**G_{high}, D, A, E_{low}**). By default, Cali comes with the following string gauges: 0.30-0.44-0.63-0.84 inch. They are cut to the length that corresponds with the 17.1" (436 mm) scale. In practical terms, the length of the strings should not be greater than 10 centimeters, from the tuner pegs, to which they would be attached, with a prior attachment of the strings to the tailpiece.

Depending on the individual preferences and strings availability on the local market, one may experiment and use strings of different gauges ($\pm 0,03$ " when compared to the stock strings set), use of different tunings may also be a possible option. One should note that usage of much thicker strings could create a necessity to introduce relevant setup adjustments. This may also require a luthier to customize the instrument, for instance, to adjust the neck nut slots width.

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Neck relief: Truss rod adjustment

To maintain an optimal level of playability and for the bass to remain stable throughout its scale, a truss rod has been used in the Cali bass that is applied to set the neck relief. The truss rod adjustment nut is located beyond the neck nut and it is protected by a decorative cover. The adjustment process is identical to a typical bass guitar.

Recommended neck relief, measured above the 8th fret after the string is fretted at the first and last fret, should be set at the level of **0.3 mm** for each of the strings.

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Action

When the recommended neck relief has been set, it is recommended that distance between the strings and the top of the 12th fret is, respectively, around **1.3 mm for the G string** and ca. **1.5 mm for E**.

Note:

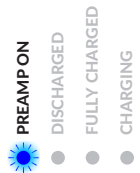
A detailed description of all of the individual set up and usage procedures can be found in our instruction manual for bass guitars that can be downloaded at the www.mayones.com website.

Using the Headphone Amp

Your Cali bass features an internal, high-quality, dual-channel headphone amp, allowing you to have unrestricted practice with a full, complete, and accurate tone, anytime, anywhere, without disturbing anybody around. The usage of modern, energy-saving components and a highly-efficient lithium-polymer battery, along with a user-friendly charging system altogether extend the period over which the amp may be used, thus making the instrument available in several different scenarios.

Switching on the headphone amp

The headphone amp is switched on with the use of a two-way toggle mini-switch in the front of the instrument. The active status of the headphone amp is signaled by the first blue LED on the left, turning on, labeled **PREAMP ON**. Details on the switch settings and LED indications placed on the electronics cover on the back of the instrument can be found in further sections of the present manual.



Volume and Tone Adjustment

The Cali bass features 4 potentiometer knobs. The first one is used to adjust the output signal level (Volume knob). It is then sent out to the 1/4" instrument, and the 1/8" headphone output jacks. The headphone out has no separate volume knob, and one volume control knob is used for both outputs. The second knob is used as a mid-control for the active EQ. Knobs three and four are stacked on a single potentiometer, allowing for adjusting the treble and bass on the active EQ.

Plugging In Stereo Headphones

The headphone amp can only work with stereo headphones fitted with a 1/8" (3.5 mm) TRS jack plug. Headphones with impedance ranging from 16 to 64 Ohms are acceptable. In the case of stereo headphones with a different plug, a proper adapter shall be used. Headphones and adapters shall be purchased separately. One shall not use mono (TS jack) headphones or headphones with an embedded microphone with a 1/8" (3.5 mm) jack with this instrument. OMTP, CTIA, or similar TRRS jack plugs are also not usable with this bass.

One shall note that the Cali mini bass is not a stereophonic instrument. For that reason, both channels of the headphones (left and right) transmit the very same, monophonic pick-up signal that is only split between the two channels of the headphone amp.

Note:

For safety and comfort reasons, the headphones shall be plugged into the instrument only after the headphone amp is switched on, with the volume knob set to a minimum (extreme left position).



Switchology (for mini and push-pull switches)






In the **lower setting of the mini-switch**, only the instrumental 1/4" jack remains active. The 1/8" headphone amp jack is switched off. Depending on the position of the push-pull volume knob, a clean pick-up signal is sent to the quarter-inch jack output (passive mode, volume knob up), or a signal with a frequency profile adjusted by the 3-band EQ (active mode, volume knob down).

With **the mini-switch in the up position**, the headphone amp is switched on as well, with the signal also being sent to the 1/8" headphone jack. Depending on the push-pull volume knob switch position, the signal sent to the headphone amp output is either clean (passive mode, straight from pick up, altered by the volume knob), or it comes out of the preamp with a 3-band EQ (active mode). With the switch set in this position, we may use stereophonic headphones as well, while playing the instrument. The headphone amp works regardless of whether the instrumental cable is connected to the output 1/4" jack. That output jack also serves as the main power supply switch for the onboard preamp with a 3-band EQ.

Switching the headphone amp on (with the mini toggle switch), and/or preamp with the EQ (volume knob in the down position, with a jack cable inserted in the 1/4" output) is signaled by a blue LED lighting up (labeled PREAMP ON), placed on the electronics cover on the back side of the instrument.

After one finishes playing, one should always leave the mini toggle switch in the lower setting, and remove the instrumental cable, to conserve the battery power. When not using the Cali bass, the blue LED (PREAMP ON), should always be off.

Push-Pull Volume Knob Switch Position		Instrument mode - passive or active
	Lower	Active mode - preamp, with the three-band EQ, is on. Apart from volume adjustment, the user may also change the tonal profile of the instrument, using the treble, mids, and bass knobs.
	Upper	Passive mode - preamp, with the three-band EQ, is off. The pickup signal is sent to the volume knob, and then directly to the instrument 1/4" jack output.

Mini-switch position		Instrument 1/4" output jack 	Headphone 1/8" output jack 
	Lower	ON passive or active mode	OFF 
	Upper	ON passive or active mode	ON

Battery charging

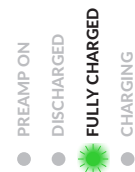
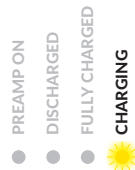
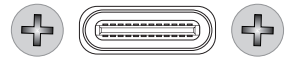
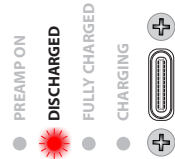
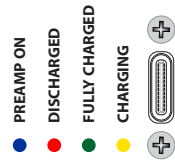
The headphone amp is powered by a Li-Polymer battery of high efficiency and capacity, allowing the user to play the instrument for many hours without any problems, and without worrying about depleting the battery. Four LEDs indicate the battery charge levels and they also provide information on the status of the headphone amp. They are placed on the cover of the electronics, on the back side of the instrument.

When the battery charge is depleted, a red LED, the second one from the left, labeled as **DISCHARGED**, lights up. Should you get the depleted battery indication, you shall charge it as soon as possible.

To charge the internal battery, use the supplied charger that provides optimized charging parameters. The **USB-C** charging port has been placed next to the LED controls on the electronics cover, on the backside of the instrument. Due to its small dimensions and the delicate nature of the USB-C port and the charger plug, one should be very cautious when plugging the charger in and during the charging process. In no circumstances use excessive force when plugging the charger in, or when removing its plug. Should any issues occur there, inspect the status of the plug and the charging input carefully. The input should be clear from any objects and dirt. Do not use the charger if the plug, or any other part of the charger, has been damaged. In no case should you use force to remove the cable. You should not remove the plug at an angle as well.

After the charger is plugged into the USB-C charging port and the mains socket, the charging process begins. This is shown by a continuous light that is emitted by the first yellow LED on the right (**CHARGING**). Should you be charging the battery after it has been depleted completely, the charging time would last **around 3 hours**.

When the battery is fully charged, the yellow charging LED switches off and the other green LED (labeled **FULLY CHARGED**) lights up. Even though the applied charging module features overcharging protection, it is recommended to unplug the charger when the battery is fully charged for safety reasons. At any moment of the charging process. You may also leave it plugged in. However, this entails a risk of damaging the charger socket and the plug if we forget that the instrument is plugged in.



The instrument comes together with a universal EURO plug charger that may be powered by voltages ranging from 110 to 240V @ 50 - 60 Hz. Should you use the charger in areas where no socket compatible with the Euro plug is available, a proper adapter should be applied (one should purchase an adapter as such separately).

When the battery is being charged, one can use the headphone amp. However, in circumstances as such the charging would take longer. It is recommended that the battery is charged with the headphone amp turned off.

When, after the charger is plugged in, the yellow charging LED does not light up, nor does the green LED become active, this may mean that your charger, charging cable, or charging port has been damaged, or that the cable is plugged in improperly, or that the battery is unplugged. In the worst-case scenario, the above symptoms may mean that the headphone amp has been damaged. In a situation as such, try unplugging and plugging in the charging cable. Alternatively, you could also use another compatible charger.

Note:

It is not recommended to plug Cali into the PC USB port, as most of these ports do not provide current that has proper charging parameters for the battery applied.

Tip:

The internal battery may also be charged with the use of an external power-bank providing 5V/1A charging power. To provide a full charge, at least 2500 mAh power bank is required. The power bank could be used as an alternative charging unit in places where no mains access is available. It is also possible to use another charger that has output parameters equivalent to the charger that comes with the instrument (5V, 1A) and has been fitted with a USB-C plug.

Important!

The USB-C port is used solely for charging the battery. It is not used as an audio output.



Headphone Amp – How long can I use it on a single charge?

When the battery is fully charged, with 32 Ohm stereo headphones being plugged in, you can use the headphone amp for around **26 hours**, with comfortable playing volume.

Note:

Do not leave the mini-switch in the top position - when the mini-switch is in this position, power is supplied to the headphone amp. This may lead to a rapid discharge of the battery.

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Battery Operation - Remarks

The Cali bass utilizes a 3.7V Li-Po (Lithium-Polymer) battery, with a capacity of 1,400 mA. The battery features PCM safeguards, protecting from excessive depletion and overcharging, which guarantees optimal lifetime for the battery.

The battery would retain its baseline performance over ca. 500 charge-discharge cycles. Should a noticeable performance and capacity drop occur, the battery should be replaced, or the user should get in touch with Mayones. The battery is placed on the inner side of the electronics cover. To replace the battery, unscrew the cover, disconnect the preamp PCB connector, disconnect the battery and carefully remove it, taking care of gently separating the adhesive. The new battery is delivered with mounting tape, making it possible to easily and rigidly install it on the back plate. The connection shall be done in reverse order.

Note:

The headphone amp may only be powered by the 3.7V battery that is the same as the original. Using any other cell may damage the headphone amp, or even lead to an explosion of the battery which may consequently cause fire and/or injury.

♯: _____ Cali _____ ♯:

Battery Disposal

The battery in the instrument is recyclable. The battery must be disposed of separately from household waste. Please treat it as hazardous waste and return it to the seller or the battery recycling point. You should only dispose of batteries that are discharged and completely depleted. This will help in conserving resources, and in protecting human health and the environment.



Important Usage Information on the Li-Poly / Li-Ion Battery



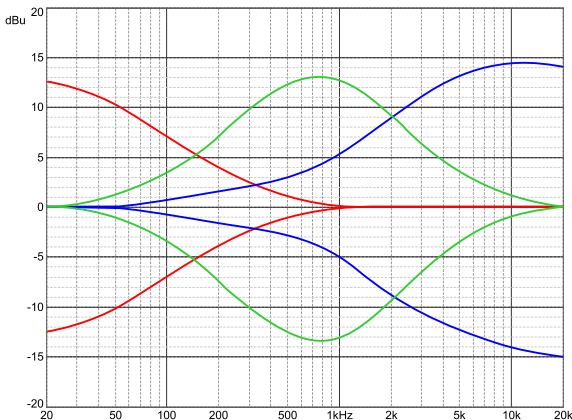
The product uses a lithium polymer cell. This type of battery is safer than its Li-Ion counterparts since the risk of electrolyte spilling has been eliminated.

- The cells may explode or release toxic substances into the environment. There is a risk of fire or burns. Do not open, crush, modify, dismantle, burn or heat the batteries above 60°C (140°F).
- Never charge the conventional non-rechargeable batteries. The batteries can explode or the electrolyte may leak out causing fires, damage, or injury.
- When installing the battery, take close notice of the polarity (plus/minus [+/-]) and install it accordingly in its compartment. Reversed position of the battery may lead to an explosion or leak of the electrolyte, causing fire, damage or stains around the battery.
- When storing or disposing of the batteries, secure the battery terminals with electrical tape or similar means of protection, to make short-circuit impossible (involving other cells or metal objects).
- When disposing of cells that have been worn out, follow the recommendations on them, general recommendations, and the general law regulations in force.
- Do not use any other cells than the one specified in the present manual. In any other case, there is a risk of fire or electrolyte leakage. This may lead to a fire, damage, injury, or emergence of stains around the battery.
- Do not store the batteries together with small metal objects. These objects may cause a short-circuit, thus creating electrolyte leak, explosion, or other issues.
- Do not heat up or dismantle the battery cells. One should not throw the cells into the fire or water. This could potentially lead to leakages, explosion, cause fire or cause injuries or damage, or stains around the batteries.
- If electrolyte leak occurs, carefully remove the battery cell from the compartment, before inserting a new one. If the electrolyte enters your eyes, it may cause sight loss. In cases as such, you should immediately rinse your eyes with a major quantity of clean water, without rubbing the eyes, and then you must contact a doctor immediately. If the electrolyte gets in contact with skin or clothes it may cause skin damage or burns. Should this happen, wash the irritated area of the skin with a large quantity of clean water, then consult your doctor.
- When inserting or replacing the battery, unplug the instrument from any other device.
- If you plan not to use the instrument over a longer period, please remove the battery cell. In extreme cases it may explode, the electrolyte may leak out, fire or damage may occur, or stains may be formed by the leak.

Specification of the Headphone Amp

Control:	1 × Volume knob (push-pull - active/passive mode) 3 × EQ adjustment knob (bass, mids, treble)
Frequency response:	20 Hz – 20 kHz
Power:	140 mW @ 32 Ohm
THD+N @ 1 kHz:	0.2%
Output jack:	1/8" (3.5 mm) TRS
Recommended headphones impedance:	32 ÷ 64 Ohms (16 ohms is an allowed option)
Amp operating period:	ca. 26 hours @ 32 Ohm
Mode switch:	2-position mini-switch (Headphone amp power switch)
LED operation/charge status indicators:	(4) on the electronics cover on the back-side of the instrument <ul style="list-style-type: none"> ● PREAMP ON ● DISCHARGED ● FULLY CHARGED ● CHARGING <ol style="list-style-type: none"> 1 - Blue - Headphone amp on 2 - Red - battery discharged 3 - Green - battery fully charged 4 - Yellow - battery charging
Amp power supply:	Lithium polymer battery, 3.7 V, 1400 mAh
Battery charging socket:	USB-C
Charging voltage:	5 V
Charging current:	1 A (minimum)
Charging time:	around 3 hours (5 V, 1 A)
Battery protection:	overcharging and deep discharging

Mayones Guitars and Basses care constantly about the quality of their instruments and release their newer and upgraded versions, as well as search for the best possible building materials. The company reserves the right to make changes without prior notice.



- Bass adjustment frequency curve
- Mids adjustment frequency curve
- Treble adjustment frequency curve



Mayones Guitars & Basses

since 1982

Find more information on guitar operation and maintenance and solving basic problems on our website
www.mayones.com.

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All parts of the instruments are RoHS compliant.

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