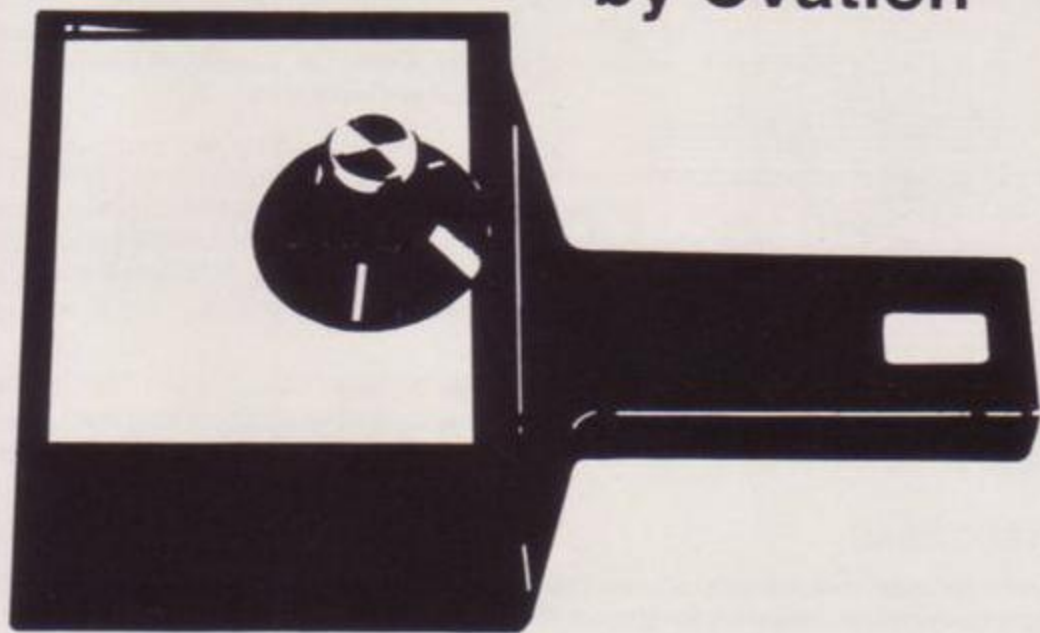


The TUNER

by Ovation



The accurate way to stay in tune.

CONGRATULATIONS on your purchase of The TUNER guitar tuner. The TUNER provides a stroboscopic light source (strobe) specially designed for use in visually tuning both acoustic (steel or nylon strings) and electric guitars. It may also be used to tune five string banjos, twelve string guitars and other stringed instruments.

You should use The TUNER to check and retune your guitar everytime you play. It may also be used to tune all the guitars in a group for perfect harmony.

After inserting a battery (see maintenance) you will be ready to get acquainted with The TUNER. The control knob on top allows you to set the strobe light in the tuning window for use in adjusting each string to its correct open string frequency. Six settings are provided:



Off — Always turn The TUNER off after use to extend battery life.

E — Use for tuning the 1st and 6th strings to the E note.

A, D

G&B — Use for tuning the 5th, 4th, 3rd and 2nd strings to the A, D, G and B notes respectively.

The TUNER will be very simple to use once you have learned the technique. Start out by first retuning a guitar that is known to be in tune or at least very close to being in tune. Just follow the instructions below to check or tune your guitar.

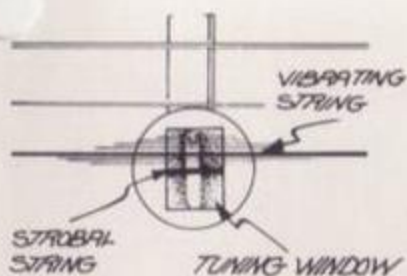
INSTRUCTIONS

Set your guitar on your lap or a table so that it is relatively flat. Insert The TUNER so that the tuning window is under the 6th string and set the control knob to the corresponding note E. Perform the following operations together continuously until the string is tuned:



1.) Pluck the string at 1 to 2 second intervals to keep it vibrating with the vibrations covering about 1/8 to 1/4 inch of the tuning window.

2.) During the interval between plucks, observe the portion of string over the tuning window. It will appear to move back and forth if the string is out of tune. If in tune, it will appear motionless or almost motionless.



3.) To bring the string into tune, tighten or loosen it a small amount between plucks, continuing to observe the back and forth motion as it appears over the tuning window. The motion will become slower if your adjustments are in the right direction. If not, the motion will become faster and you must reverse your adjustment. As the motion slows, use smaller and smaller string adjustments until the string is in tune as described in step 2.

Repeat the procedure for each string. The TUNER is capable of tuning each string to higher frequencies of the same note. Therefore, if any string sounds too high after tuning, loosen it until you find the next lower tuning point. Since the first string (E) may also be tuned to lower frequencies, if it sounds too low after tuning, then tighten it until you find the next higher tuning point.

The TUNER may be used to tune other stringed instruments where there is sufficient clearance to insert The TUNER and locate the tuning window beneath the strings. Use The TUNER to tune such instruments to the same or higher frequencies of the open string E, A, D, G and B notes of the standard guitar. By fretting and tuning a string to one of these notes, a different open string frequency can be tuned.

For example, fret a string at one of the higher notes of The TUNER and tune the string. Try this on a bass guitar. Check intonation by comparing the open string tuned condition to the 12th fret tuned condition.

MAINTENANCE

The TUNER uses a standard 9 volt battery which is inserted through the removable cover on the bottom rear of the case. Remove the cover by prying at the small indentation and plug the battery into the cable-suspended battery connector inside the case. In normal use, a quality alkaline battery should be replaced about once per year. Near the end of the battery's life, the strobe light will become slightly dimmer and the accuracy of your TUNER will decrease. When this becomes noticeable, install a new battery.

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