

Acoustic Enhancer Mk2a

for
violin, viola, 'cello and bass



Andrews of Harrogate
Violin repairer



Thank you for buying this Enhancer. I hope you will join the many players, makers and dealers who have found it to be of great use in stimulating and preserving the response of their instruments.

This Mk2a version is broadly similar to the Mk1 but is improved in two areas. The operating frequency is lower so it produces less noise whilst working, and it is adaptable to other instruments in the family by a system of replaceable bases. This means a big cost saving to dealers, workshops or collectors with different instruments.

Just as the human body or a car engine benefits from exercise, so does a string instrument. The theory behind the AE Mk2a is gentle vibration through the bridge for 72 hours or more, simulating the playing-in needed by a new or rested instrument. It also usefully settles an instrument after bridge or sound post replacement, for example.

There are two connected units. The power unit plugs in to the mains (90-230v) and produces a selectable and safe DC voltage of between 3 and 12 (<300mA). The other unit – the vibrator - attaches to the bridge of the violin, viola, cello or double bass via a base with a standard rubber mute. The unit can be secured by a Velcro strap or rubber band under the bridge and over the unit to prevent any tendency to “walk” off the bridge as it vibrates. I’ve not found the strap necessary except for a cello or bass on its side.

To allow the violin to vibrate as freely as possible, it’s best not left in its case. Attaching the shoulder rest and laying the violin on a hard surface is ideal. A cello or



bass can rest on its side without too much damping. The instrument should be strung, tuned up to pitch, with the bridge vertical.

Attach the AE to the bridge. In the case of the violin base, fit the unit so that the curve of the mute dips towards the E string. On a viola, the bridge may be wider than the mute, in which case slit up the ends with a sharp knife to allow the bridge to poke through. On all instruments you might secure with the strap under the bridge and over the vibrator.

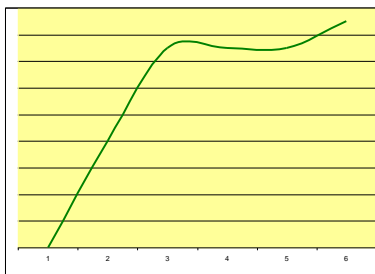


Set the voltage by turning the yellow selector on the inside of the power unit to 6 and plug in to the mains. Increase the voltage until you feel vibration throughout the instrument. *Settings 6 or 7.5 for violin and perhaps higher for cello or

bass seem good compromises between strength of vibration and quiet running. The unit is quite safe up to the maximum 12 setting but is working most efficiently before it starts to sound lumpy. If you hear an unusual vibration check that the lead connecting the two units is not touching the body of the instrument. You may get rattles from anything loose on the instrument also. The units are quite robust but don't drop them or allow them to get wet. The Enhancer can be run indefinitely but the greatest improvement will occur after 3-6 days.

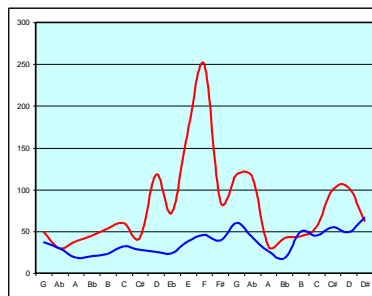
I've had occasional reports of the vibrator not working after a while. Check that the power unit is switched on and its red light is visible. If no red light the power unit has failed. Let me know and I'll send you another free of charge.

* Depending on the motor used, it might run on the 3 and 4.5 settings, but 6 or 7.5 and above have proved most useful.

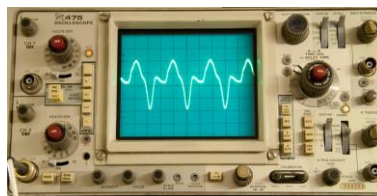
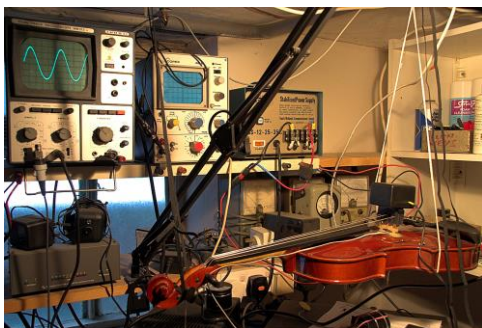


In tests, a sensor on the violin belly at the top end of the bass bar measured improvement in acoustic "conductance" over 6 days. The graph (left) shows 3 days as optimum for this particular violin.

The second graph (right) shows the peaky response of a new violin **day 1** compared with the much more even sound on **day 6**. Measurements were taken from G up to Bb (1st position chromatic scale).



To change the base to suit another instrument, undo the four screws and gently pull off the base. Don't disturb the connecting lead on one corner (top left in picture). It should stay tucked into its rebate, to be compressed again when the new base is screwed on with the four screws. Don't operate the vibrator without a base plate.



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