



MULTIBENDER

MANUAL

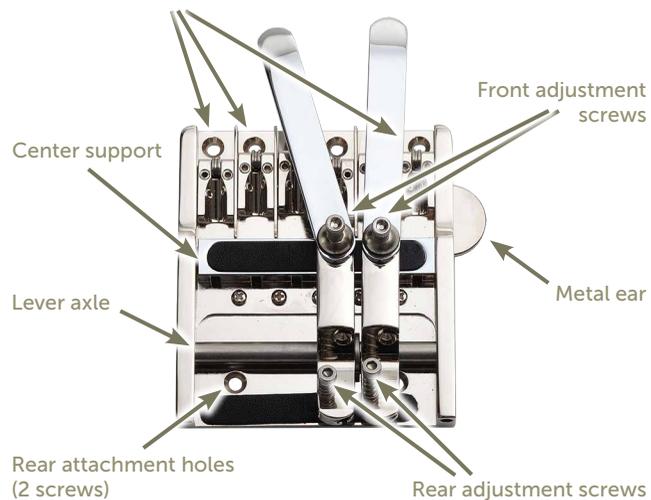


The **Duesenberg Multibender** enables you to play authentic sounding pedalsteel licks on nearly every normal electric guitar or lapsteel with a flat top. You can raise or lower individual strings from 1 to 3 half tones (depending on the string gauge used) by pressing with the palm of the right hand on one or more of the multibender's levers, which is normally done with a foot pedal or knee lever on a pedalsteel guitar.

The levers are attached to an axle behind the center support. The strings to be bent are fixed to the levers and then run over rollers through the center support. Each lever has two screws for adjusting the resting point and the amount of pitch change.

The basic equipment includes two levers. Theoretically there is space for up to three additional levers, although a maximum of three levers in total is recommended for convenient operation.

Front attachment holes (6 screws)



Allen screws for securing the axle

Mounting preparation

First of all make sure that the height of the multibender's bridge saddles (11-14 mm) is compatible to the given neck angle on the guitar so that the action of the guitar can be properly adjusted.

Please note: The metal ear on the right side of the multibender's base plate is meant to be used on a guitar with a tremolo routing and must otherwise be removed to avoid damage to the surface of the instrument!

If you wish to add or remove a lever, now would be the best time to do this. Loosen the two Allen screws on the end of the base plate and slide the axle to one side. When adding an extra lever, don't forget to install the enclosed washer which prevents friction between the levers. When completed, slide the axle back in place and tighten the two Allen screws.

Installation on a body without tremolo routing

Before removing the original bridge, first measure the distance between the nut and the bridge saddle of the high e-string. This measurement is needed for the exact positioning of the Multibender bridge.

Before positioning the Multibender it is recommended to protect the respective area on the guitar top using masking tape to avoid scratching the surface.

Place the Multibender on the guitar top so that the high e-string saddle position matches the previous measurement (see above). The front of the base plate should be perpendicular to the center line of the guitar. Then use a piece of thread stretched between the nut and the bridge saddles of the outer strings to center the bridge. When the distance between the thread and the edge of the fingerboard is the same on both sides, the bridge is in place.

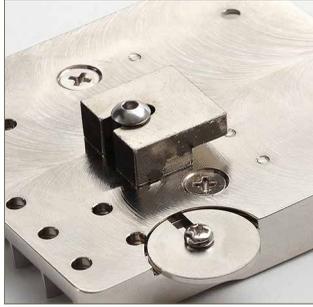
Now mark the positions for the eight attachment screws and drill the holes with a 2mm drill. Use the enclosed screws to mount the bridge.

Installation on a body with vintage tremolo routing (i.e. Fender Stratocaster)

In this instance only the front six screw holes are needed. A new positioning of the bridge is not necessary, because the six original holes are in the right place. However, these holes must be doweled and re-drilled with a 2mm bit.

If the guitar is equipped with a modern tremolo with a two-bolt mounting system, the existing holes can not be used for positioning the Multibender bridge. In this case follow the instructions for installation on a body without tremolo routing. It may be necessary to dowel the original holes.

The rear two attachment holes shall not be used. Instead use the enclosed mounting bracket to secure the Multibender under the lip of the tremolo routing. The bracket is screwed into the base plate with the supplied Allen screw. The metal ear on the right side of the base plate is meant to cover the visible part of the routing.



Mounting Bracket



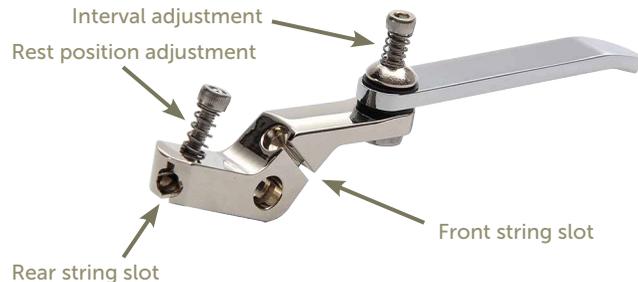
Installed Multibender

If you decide to remove the Multibender and re-install the original tremolo no visible marks will have been left on the guitar. The six mounting holes will however need to be re-drilled.

Stringing

Align each lever so that the string runs straight through the center support under the roller and then over the bridge saddle. There are no rollers for the low E and A string.

If the pitch of the string is to be raised by the bender, then the ball-end needs to be inserted at the end of the lever. If the pitch is to be lowered, the other string mounting hole in front of the axle should be used. The string should then be threaded through the center support and over the saddle.



The non-levered strings are fed directly into the center support.

The levers that lower the pitch of a string require an extra spring which is inserted underneath. The spring must be clamped between the small pin on the lever and the corresponding screw head on the base plate.



Lever spring

This somewhat tricky job is made easier if you first unscrew the rear tuning screw completely so that you can lift the lever as far as possible. Then push the lever in question sideways slightly out of its position, clamp the spring and then push the lever back into place.

Adjustment

The string height is adjusted using the two 1.5mm Allen screws near the front of the saddle. To adjust the intonation loosen the third Allen screw (first loosen the string tension!) and push the saddle into the proper position. Then push down the end of the saddle and re-tighten the screw.



The two longer threaded screws are used to adjust the adjustment range of the multibender levers. The rear screw determines the rest position of the lever. The front screw is used to set the interval by which the string should be detuned when the lever is operated.

To adjust the lateral mobility of the front lever section, the front screw incl. spring must be removed. Then use a 3mm hex wrench to adjust the strength of the lever (see photo below).

The large nut on the bottom holds everything together and must not be loosened under any circumstances!



Additional levers for the Multibender as well as other accessories are available directly at the Duesenberg Store:

store.duesenberg.de



Duesenberg Guitars - Hannover, Germany
duesenberg.de