



Measuring the Key's Position



"The foundation of all piano regulation is key leveling".

This is the first article in a series that explores each step in using the QuicKey Leveler to level keys and set dip. To read all articles please [click here](#) and download a PDF copy of 2011 Newsletter Articles.



The first step in using the QuicKey Leveler is measuring the position of all keys (naturals and sharps) in both the rest and dip position. This is done by clamping a rail clamp to each side of the piano frame.

A precision aluminum rail is mounted in special receptacles on each rail clamp above the key board and a removable gauge positions the rail correctly above the keys (see clear part touching the keys in the picture). The clamps have adjustments to position the rail correctly relative to the top and front of the keys. It even has a pivot adjustment so that the rail is positioned to match the incline of the keys front to back. Although care should be taken to position the rail, if it is off the software will compensate for any small set-up errors.

A special block slides along the rail above the keys with a dual position indicator assembly. It consists of a special holder that positions a measuring tip and digital indicator above the keys. It has three positions rest, dip and park. When in the rest position a counter balance system is used to measure the rest position of the key without actuating the key. The park position lifts the tip above the key so that it will not slide along the keys when moving it from one end to the other. It is best to measure all of the natural keys in the rest position first, then in the dip position. The indicator assembly is then moved to the rear of the block to measure the sharps in their rest and dip position.



The position of the keys is either copied onto a form (see next page) where the key position is manually entered into the QuicKey Leveler software program or the data can be automatically sent to the program using the optional Automatic Data Entry Tool (ADE). The ADE tool connects to the USB port of your PC computer and when a button on the tool is pressed data is sent to the position field in the software program.

Other pertinent key length and pin position measurements need to be taken as well. These are fed into the QuicKey Leveler software program to eventually give the technician a report that tells how the punchings need to be adjusted to get the keys in their perfect rest and dip position.

To learn more about the QuicKey Leveler Rail and how key position is measured [click here](#).