



Instructions for Ordering a Full Set of *Arledge* Optimized Piano Strings

A companion video can be found at
www.pianostrings.com/order.htm



Watch the video while reviewing these instructions:

General notes:

To obtain the correct strings, properly ordering is essential.

Optimal results are rarely achieved by sending or duplicating old strings or measuring a full paper pattern. There is a better way.

The Arledge Measure Kit contains all supplies needed to accurately order the correct strings without removing or sending the old strings.

To order the Arledge Measure Kit go to
www.pianostrings.com/order.htm then
click the **ORDER MEASURE KIT** button.

"The best information comes from the piano, not from the old strings."

Inside the piano, the strings follow a path. This path starts with a hitch pin on one end and stops with a tuning pin on the other. This length will be measured. Along this path are two points that terminate the sounding segment of the string. These termination points will be measured as well. A total of three distance measurements will be measured from the (1) hitch pin to lower termination point (speaking bridge pin center), (2) hitch pin to upper termination (agraffe) center, and (3) hitch pin to tuning pin top center.

For most pianos these three measurements of four different string paths will be measured.

"It is not necessary to measure all the string paths or to measure the old strings."



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To obtain the specifications needed, basic piano case parts must be removed to provide access to the strings. Go to: www.pianostrings.com/disassembly.htm for a video demonstration.

When the inside of the piano is accessible, use the "**Bass String Set/ Order Form**" to record the requested information. For a printout go to www.pianostrings.com/order.htm and then click the **PRINT ORDER FORMS** button.

GENERAL TERMINOLOGY:

STRING NUMBERS are specified by counting each successive string, starting with the lowest.

NOTE NAMES are specified with a musical letter followed by an octave number. Seven octaves of a standard 88 note piano are numbered beginning with the lowest C note named "C-1". Twelve different notes beginning with "C-1" are in octave one. Note "C-2" is an octave above C-1 and begins octave 2. Notes below "C-1" are designated octave zero because this is not a full C to C octave. For most pianos, the lowest note name is "A-0".

STRING TYPES are determined by the number of strings sounded per note.

"Uni-chords" strike only one string per note.

"Bi-chords" are designed as pairs sounding two strings in unison.

"Tri-chords" sound three strings per note.

TO BEGIN: Enter the customer and piano information on the "Bass String Set / Order Form".

STEP 1: Specify the note name and three measurements of the lowest #1 string path.

NOTE: The preferred units for measuring is millimeters. A short video demonstrating the easy way to measure in millimeters and the reasons why is available at: www.pianostrings.com/measure.htm

To measure, pull a length of the Arledge tape measure in excess of the longest string and lock it. Start from the tuning pin end and thread the tape along the path of the lowest string. Place the measuring tape over the #1 hitch pin. All measurements begin at the hitch pin. For ACCU-hitch roll pin type hitch pins, insert a sharpened pencil into the hollow pin to hold the tape. Measure the distance to the lower termination point. For standard bridge pin configurations, this is the bridge pin furthest from the hitch pin. Record the measurement on page two in the box labeled "Lower Termination #1".



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Next, measure the distance from hitch pin #1 to the #1 upper termination point. *This point may be the center of an agraffe, capo d'astro bar, or a termination ridge with guide pins.* In any case, enter this measurement in the "Upper Termination #1" box.

Continue measuring from the hitch pin to the top center of the #1 tuning pin. Enter this measurement in the box labeled "Tuning Pin #1".

These same specifications and measurements are also needed for the following strings:

STEP 2: Specify, measure and record the highest uni-chord string path.

STEP 3: Specify, measure and record the lowest bi-chord string path.

STEP 4: Specify, measure and record the highest bi-chord string path.

Special Cases:

Some pianos utilize wound tri-chord strings.

If applicable, the **lowest and highest tri-chord** strings must be specified, measured and recorded on the form.

For pianos with wound strings in the middle or tenor section:

Specify and measure each individual **tenor string path**. Record each distance beginning on page three of the order form.

This completes all essential specifications and measurements.

The final step of the ordering procedure involves making two paper rubbings.



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STEP 5: Make Paper Rubbings.

1. Remove the contact paper and carbon paper supplied in the Arledge Measure Kit.
2. Peel the backing from the contact paper and save it for reuse.
3. Lay the adhesive side of the contact paper over the full extent of the bass section tuning pins and upper termination points.
4. Start in the middle and lightly press the paper down and towards each end, enough to make contact and with as few wrinkles as possible.
5. A light rub using the carbon paper will highlight the top of the tuning pins and upper termination points.
6. *If a capo d'astro bar is used, stick the contact paper to the top of the bar first and then over the tuning pins. Each upper termination point must be penciled in on the contact paper which is attached to the top of the capo d'astro bar. The actual upper termination points are inaccessibly located on the bottom of the bar. The penciling will simulate the spacing and position of each upper termination point.*
7. Ensure that all points are clearly marked and then remove the contact paper.
8. Lay the paper rubbing upside down on a flat surface and then replace the backing.
9. Turn the rubbing over and number each tuning pin and upper termination point.
10. Follow the same procedure for the second rubbing to reveal the distances between the hitch pins and the lower termination points.

**It is not necessary to make paper rubbings for the tenor section.*

11. Ensure all points on both rubbings are marked and numbered before leaving the piano.

The string order is now complete and ready to send to Arledge Music Wire.

NOTE: During this visit, the condition of the old tuning pins and pin block integrity should be assessed. If replacing the old tuning pins, new pins should be ordered at this time. Unless the piano needs a new pin block, there is no need to remove the old strings until the new strings are in hand and ready to install

