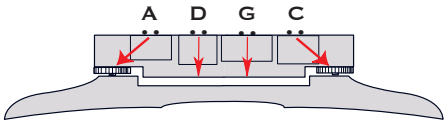
The secret to a balanced mandola…

MANDOLA

Mandola luthiers and musicians have always strived to solve the problem of attaining that elusive balanced tone, from the thinnest *A* string to the thickest *C* string. But now the quest is over.

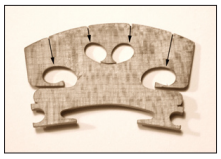
Here's what we found: The heralded adjustable bridge patented by Gibson in 1921 solved the problem of adjustability but left us with a bridge with the outer *A* and *C* string pairs positioned near the posts of the bridge and the inner *D* and *G* string pairs positioned in the center of the saddle. The result is an imperfect balance in tone, sustain, and clarity of the string pairs positioned near the posts compared to those sitting in the center of the bridge's saddle.



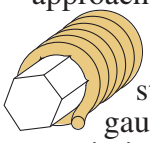
Strings positioned near the posts can't deliver the same energy to the soundboard as those strings positioned in the center of the saddle.

Where strings are anchored to a bridge, such as on an acoustic steel string guitar, compensating the *longitudinal tension* is critical for good string-to-string clarity, sustain, and tone. But where a movable bridge is concerned (such as on the mandola), the soundboard is driven by the *lateral energy* that is transmitted down through the bridge's posts to the soundboard, and this presents a new paradigm of considerations.

Stradivari knew this: One of the great developments in the history of bridge design is attributed to Antonio Stradivari (1644-1737) who, in the late 1600s, realized the importance of the strings' down pressure on the violin's belly (soundboard). As a result, he designed a bridge with strings positioned over openings where no string's energy had a direct route to the belly. His design, with Guarneri's (1698-1744) embellishments, is seen on every member of the violin family today.



A solution for the mandola: Since we knew we couldn't change every bridge, we took a straight up approach to this challenge and focused on how the strings' energy is driven through the bridge. As a result, we engineered a set of mandola strings with a combination of plain and wound gauges whose relative down pressure loads and proximity to the bridge's posts are the primary focus. Our research brought about a paradigm shift in string design with carefully engineered core-to-wrap wire combinations that deliver *compensated* down pressure for improved balance, tone, and feel.



We call them **Straight Up Strings** and we know you'll like them!

Straight Up Strings
engineered with compensated downloads for optimum balance.

…every note of every chord

Specifications:

Mandola, medium, #2900-M

• Gauges: *A* .015″ *D* .0225″w *G* .034″w *C* .053″w • Compensated downloads (pounds): *A* 5.8 *D* 5.2 *G* 5.3 *C* 6.2
• Total download at bridge base: 45 pounds • Total longitudinal tension: 180.4 pounds

*Downloads measured: At 15° string break angle (the angle the strings make as they pass over the bridge). 15° is typical for mandolas with a 5.5° neck pitch.

Wound with PHOSPHOR BRONZE for optimum tone color

Manufactured and packaged: U.S.A. • Dealer inquiries invited.

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