

REACH NEW LOWS



KC Strings' gated double bass extension kit makes it possible for more players to go below the staff.

A product review by **Chris Rund**
Bloomington, Indiana

After a 20-year lapse in orchestral playing, owing to stumbling onto a non-musical career path, raising a family and other stuff that ushers us into middle age, I decided a year ago that I'd better get playing again, before the effects of age make it impossible. The first step was to find a good mid-grade instrument, suitable for playing in my community orchestra.

I learned that a lot has changed in instrument making in the last two decades. After weeks of researching the plethora of instruments now being produced from Asia to Eastern Europe and the US, I purchased a Shen 7/8 Gemunder model that I found listed on eBay by a pawnbroker. The instrument, including a Heliomar Cirilo bow and ProTech bag, set me back less than \$2,200.

The big Shen bass has far exceeded my expectations, and I've grown to love it so much, that I decided to consider giving it a low C extension. But the cost of a custom extension—plus the expense of transporting the instrument to a bass luthier able to do the job—would approach the purchase price of the entire instrument. Wasn't there a more appropriate solution out there somewhere?

I discovered that KC Strings, of Kansas City, has a superb

answer. Their [gated extension](#) is a pre-fabricated, off-the-shelf extension kit, designed to be fitted to virtually any instrument without modification to the scroll (i.e. drilling a string channel or cutting to accommodate the extended fingerboard).

Bass Innovators

Spend time talking with Anton Krutz, and the word innovation will come up more than once. Krutz, the younger of the father-son Krutz partnership behind KC Strings, is passionate about innovation in all aspects of string playing. A world-class luthier, Krutz is every bit as fervent about the current and future state of music education, creative development and new career paths for string players. Krutz is also the founder of [StringsHub.com](#), a creative online forum where players can share video uploads.

The senior Krutz, Misha, is a professional bassist who trained and began his playing career in Russia prior to coming to the US, where he played with the Kansas City Symphony. It's no surprise, therefore, that KC Strings has become known as one of the premier bass shops in the country. And the innovative spark shared by the Krutzes extends to their earlier partnership with inventor/designer Rick Williams, who created unique accessories

well known by today's bassists. Notable among them are the Bass Buggie (an instrument transport dolly), a combination folding bass stand and player seat, and "peg leg" wooden endpins with angled mounting blocks.

Sizing Up The KC Strings Extension

After looking at the information and images of the extension on KC Strings' website, my initial questions and concerns were:

1. What materials are used in the design?
2. My local luthier isn't a bass specialist—is the KCS extension designed in a way that makes installation straightforward for a technician who isn't bass-centric?
3. In the end, would I have a bass that's still as playable and free of unwanted buzzing and other idiosyncrasies? And, moreover, would I be pleased with the purchase?

Updated Design

KCS formerly marketed extensions with bodies fabricated from brass, however, player concerns about excessive weight, along with rising material costs, led to a redesign with a maple body. The fingerboard and gates are still crafted from ebony. The gate assemblies slide along a brass channel laid into the body, and each locks in place with a chrome-plated cap nut. Each gate pivot is topped with a similar nut. The height and closure of each gate is regulated with an adjusting screw on the underside of the gate assembly.

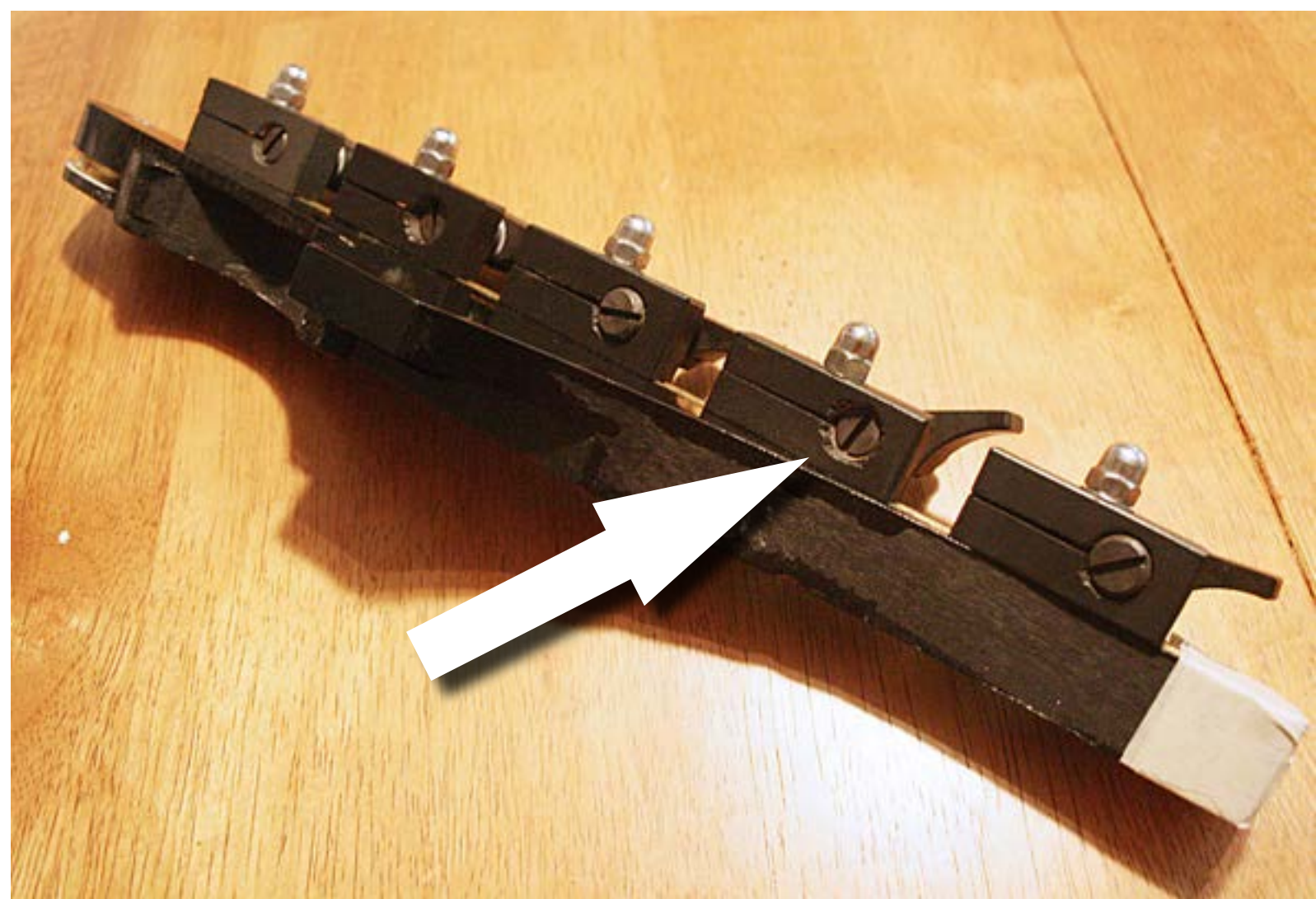
The extended string loops over a brass pulley at the top of the unit and is routed around the scroll via a channel bored in the extension body. This eliminates the need to drill a string path through the scroll of the instrument.

The extension body is available in two finishes—basic black, and an amber varnish (the same formula used on instruments built in the Krutz shop). My bass is more of a ruddy-chestnut hue, so I opted for the black finish.

Installation

The extension kit arrived well packed, with all gate assemblies installed but not adjusted. A bundle taped to the extension contained two small brackets and Phillips screws to help secure alignment of the extension with the peg-

Below: The extension and instructions upon arrival. Middle: The treble-facing side of the extension. The arrow shows the location of the scroll nook; installation involves removal of material here to precisely fit the scroll. Bottom: The rear-facing view of the extension. The arrow points out one of the screws regulating gate height above the extended fingerboard.



box wall. (Most of the retaining force is provided by the string tension.) A set of written instructions and a technical drawing accompany the contents of the package.

A key component that isn't included is the extended E/C string; you need to supply your own. I use Helicore low-tension orchestral strings, and I had my extended E/C at the ready.

I loaded up my bass and the extension kit and visited my local luthier, [Stephen M. Schock](#). Steve owns a shop geared to serving the diverse needs of string players in the Bloomington, Indiana community, which primarily comprises the student population of the Jacobs School of Music at Indiana University. Long before I purchased the KCS extension, I approached Steve with photos and written installation instructions from the KCS website to see if he was willing to tackle the project, which is unlike typical work that comes in his front door. He had removed a few extensions from basses over the years, but never installed one. Nevertheless, after reviewing the written procedures, he agreed without hesitation to do the job. His scope of work would be modifying the nut and doing the fitting and installation of the extension and the E gate, with tuning and positioning of the remaining gates left to me.

Installation mostly involves removing wood from the extension body so that it conforms to the shape of the scroll and creates a true linear extension of the existing fingerboard. It is a painstaking process that must be followed patiently to avoid removing too much material. (Although this can be rectified with the use of a rubber shim, it's better not to remove too much wood.)

The Luthier's Report

When I picked the bass up at Steve's shop, he confirmed the long process of sequential test fittings between making incremental reductions to the extension body. Steve also noted that sufficient time was required to absorb the learning curve associated with a new product and procedure. He mentioned that the technical drawing didn't prove very useful to him, but the written instructions were thorough.

Taking the bass in hand, I immediately noticed that the action of the new, fully open C string was perfect. Steve

noted that he followed the written specifications meticulously to bring the action into the specs recommended by KCS (notably, a 5mm string height above the fingerboard at the E gate). This is especially significant due to the fact that my instrument has a fairly beefy scroll, which required removing nearly every available bit of wood from the extension's scroll nook in order to produce the correct geometry. (If the installation doesn't truly conform to a linear extension of the main fingerboard—in other words, if it creates a slight angle—the open extended string will float higher above the fingerboard and gates, making it more cumbersome to finger notes and requiring the player to manually depress the string before the gates can be closed.)

Lockdown

Excited by what I'd seen at the shop, I rushed the bass home to tune and position the gates and finish the job. I set the gates with an iPhone digital tuner app, which detected the overtones at this extreme end of the tonal spectrum. I corroborated the digital readings for the C and D stops by observing sympathetic vibrations of the open G and D strings, respectively.

Because the KCS extension is a standardized product—not custom sized for individual instruments—the open string pitch is indeterminate, subject to the overall string length of the bass. Consequently, the extension is equipped with a fifth adjustable gate to stop the low C. (The open string on my bass falls between a B and C.)

Skip and Go Naked

The KCS extension's design allows the player to install as few or as many gates as desired. Go full-chromatic with all five, or, as some players prefer, use just the D stop between the C and E. Or, if you prefer, you can skip the gates altogether and leave the extended fingerboard bare, creating a fully fingered extension. Players interested in this option may want to modify the treble-facing side of the extension by adding a thumb shelf to aid in pinching the string; the KCS extension body doesn't have leave open space between the scroll and the extended fingerboard.

What's the Buzz?

After locking down the gates, I eagerly began exploring the bass's extended voice, which was incredibly satisfying both to the ear and under the fingers. Early into the test



Above: The KC Strings extension doesn't leave any open space between the scroll and the extended fingerboard; bassists whose playing style favors fingering notes on the extended fingerboard may find it helpful to modify the design by adding a thumb shelf in the area pointed out by the arrow.

drive, however, a hellacious buzz developed. My heart sank; suddenly I thought my affordable extension had induced a chronic side effect. I doggedly began squeezing and pinching every nook and cranny of the extension, trying to deduce where the noise was coming from.

Befuddled, I continued to make long, loud draws on the open C string. Suddenly, the buzzing stopped as something fell off of the instrument and into my lap—a brass machine screw. I had explored the extension thoroughly prior to installation and did not recognize the part at all. It wasn't until I rested the bass in the corner that I noticed where it belonged—it was a retaining screw from one of the instrument's main tuning machine spindles that had worked itself loose, probably resulting from the vibrations that now extended through the entire scroll.

The next day, warming up for a concert, I again heard a similar buzz. This time, I quickly spied the culprit: a retaining cap screw for one of the gates had worked loose. I didn't have tools to fix it, but spinning it back into place finger-tight did the job, and it has stayed in place ever since without any additional fuss. (In the future, my gig bag will include a 10mm box wrench just in case.)



Above: A view of the gates and closing levers. Players will find that the gates will operate increasingly smoothly as they are broken in. The author also discovered that the extended string can vibrate sympathetically and create minor buzzing while the instrument is being played with only the E stop closed. Keeping at least one intermediate gate closed eliminates the issue.

Summary

From a shop of innovators lauded by professional bassists, the KC Strings Gated C Extension is an off-the-shelf solution that can be installed with a few hours of patient work by a skilled luthier. The end result is a fully chromatic, gated extension for hundreds of dollars less than a custom-made piece. With a lower cost threshold, the KC Strings extension makes adding low-C capability financially justifiable for mid-grade instruments and is built well enough to complement fine old instruments, as well. KC Strings' innovative design, quality materials and craftsmanship result in a highly satisfying playing experience.

- Available online at the [KC Strings website](#)
- Purchase price: \$750 (Extended string not included)
- My cost for installation: \$250 (Your cost will vary, depending on your local luthier; mine included fitting to the scroll but not tuning/setting individual gates. KC Strings also offers installation service; see their website for details.)

Reviewer Recommendations:

- If you plan on having a local luthier do the installation (especially one who is not a bass specialist), speak with him/her in advance to discuss installation requirements

and costs. Supplying the photos and downloadable installation instructions from the KCS website will be helpful.

- Carry a 10mm wrench in your gig bag, just in case you need to adjust any of the hardware on the road.
- Check the fit of your gig bag carefully; the KCS extension will add more than an inch to the height of the instrument and could affect the closure of a snug-fitting bag.

Correction:

This review originally attributed the Bass Buggie and other inventions cited in the text to KC Strings in the generic sense. These designs were created by and remain the intellectual property of R.C. Williams, a former co-owner of KC Strings who now markets these products through KC Strings and other resellers worldwide. Williams produces the products through his company, [KCNC Production and Design](#).

About the Reviewer

Chris Rund was a double bass performance major at the Indiana University Jacobs School of Music, where he studied with Murray Grodner, Lawrence Hurst and Bruce Bransby. After his studies at IU, he embarked on a career in broadcasting and communication arts. He currently resides in Bloomington with his family and is a member of the [Carmel Symphony Orchestra](#).