

The Perfect Range for a Compact Digital Keyboard



A “short report” by David Bolton, musician and author of [“How to Memorize Music –A Practical Approach for Non-Geniuses”](#)

Note from the author: You have the author’s permission to give copies of this eBook to as many people as you wish. Spread the word! Let’s see if together, we can convince keyboard manufacturers that the time has come to give us what we really need!

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The Perfect Keyboard Range for a Compact Digital Keyboard

There are many people who want to have a keyboard that has a range smaller than that of the piano, and digital keyboard manufacturers have in fact produced many that have less than 88 keys (the range of a piano).

The standard these days for smaller keyboards seems to be 61 keys, five octaves, from C to c4. It is true that five octaves are enough to play a large part of the keyboard literature, **however**, practically **all** the keyboards sold today with a five-octave range do **not** allow one to play much of the classical literature at all!

Why not? Because manufacturers have, very nearsightedly, created five-octave instruments that have a range of C to c4 (that is, from the "C" two octaves below middle C, up to the "c" three octaves above middle C).

Of course, there is a market for five-octave keyboards, since some people value portability, and the fact that smaller keyboards are less expensive. Yet if a manufacturer plans to produce a five-octave keyboard, shouldn't a very important, and plainly obvious question be asked first, namely:

What keyboard range will permit the player to play a maximum number of pieces on it?

Apparently, companies receive poor advice from their "experts", for all companies who produce five-octave keyboards continue to make them with the impractical C to c4 range.

Virtually **all** five-octave keyboards today have this range, even though this "C to c4" range **cannot be found** on any "real" instruments, at any time in history!

In fact, this range is totally nonsensical, because it does not permit the musician to play a large part of the classical repertoire.

True, up to about 1800, almost all the keyboard music could be played on a five-octave instrument, **but**, the instrument had to have five octaves, **from FF to f3, not C to c4.**

The following illustrations demonstrate this point with precision.

On the following keyboards, I have marked the keys necessary to play the music of J.S. Bach, G.F. Händel, Domenico Scarlatti, Joseph Haydn, Muzio Clementi, W.A. Mozart, and the early sonatas (up to Opus 49) of Ludwig van Beethoven.

The music of J.S. Bach and Händel requires a keyboard range of GG up to e3, as marked in red. The modern-day standard five-octave digital keyboard, since it does not go below C in the bass, does not permit the musician to play works such as the Partitas of Bach, or some pieces of the Well-tempered Clavier.



In these diagrams, the red line indicates the notes needed to play the music of the mentioned composer; the blue line shows the range of the 5-octave, C to c4 digital instrument: it can be seen that these modern keyboards have too many notes at the top, and too few at the bottom.

The range needed for Scarlatti is marked in red. This is also the range needed for some of Beethoven's sonatas. As can again easily be seen, the five-octave, C to c4 instrument has too few notes at the bottom:



Next, we see the range needed for C.P.E. Bach, Haydn, Mozart, and some of early Beethoven. Once again, the five-octave keyboards presently available do not permit the music to be played, due to their having too few bass notes:



The conclusion is obvious: the five-octave digital keyboards whose range extends from C to c4 are totally inadequate for playing Scarlatti, C.P.E. Bach, Haydn, Clementi, Mozart, much of J.S: Bach, and early Beethoven – yet these are the composers whose music practically everyone who learns the piano must play!

Historically, there never was, to my knowledge, a keyboard with a range of C to c4. In the 17th century, many keyboards with only four octaves extended from C to c3. However, when the keyboard began to expand, it developed approximately in this way:

C to c3 (four octaves)

C to d3 (four octaves, plus two notes at the top)

C to e3 (four octaves, plus four notes at the top)

C to f3 (four octaves, plus five notes at the top)

About the same time, the expansion was also continuing downwards:

C down to BB

C down to AA

C down to GG

C down to FF

In the mid- to late 18th century, some keyboards went up to g3. Thus, by that time, a keyboard had five octaves, plus 2 notes

FF to g3

This is the range that permits the musician to play all of the keyboard works through the time of Bach, and even up to the middle sonatas of Beethoven.

With this range, a keyboard is relatively compact, yet the musician can practice the works of Couperin, Rameau, Bach, Händel, C.P.E. Bach and his brothers, Haydn, Clementi, Mozart and over half of the sonatas of Beethoven.

And yet, NO manufacturer makes a keyboard with this range!

There is a demand for such a keyboard. This subject is often mentioned in internet keyboard forums. But till now, the manufacturers have **not** been listening to what customers want.

There is one keyboard with an F to f3 range: the Roland C-30 digital harpsichord/fortepiano/organ. However, Roland was perhaps a bit nearsighted when they limited the range to F to f3: by adding just two more keys (extending up to g3), customers would have been able to play **all** of the Scarlatti sonatas (many require that high g), and also several more Beethoven sonatas. It might also be mentioned that the Roland instrument is very expensive, and lacks real portability due to its bulkiness and weight.

So why doesn't a manufacturer produce, for example, a relatively lightweight "controller" keyboard with a five-octave range, F to g3? Such an instrument would be the only one of its kind in the world, and would be the first choice for anyone who plays classical music, and wishes to take advantage of computer-driven sampler software to play thousands of excellent compositions. I don't think I would be wrong in assuming that a lot of people who play modern music would

also be attracted to such an instrument: no doubt there are many players out there who would prefer more bass notes, at the expense of a few notes in the treble. And since this would be the only keyboard with a range of F to g3, instead of the omnipresent “C to c4” layout, the very fact that this keyboard would be unique in its range would mean more sales than could be gained by yet another C to c4 keyboard.

If you agree that a digital keyboard with a range of F to g3 would indeed be an ideal answer to many musicians’ needs, then the next time you go to a music fair, have a chat with one of the technicians from Yamaha, Roland, Casio, or any other digital keyboard manufacturer, and express your thoughts on the subject.

Don’t forget to ask for that person’s email address, so that you can send him/her a copy of this PDF. You have my permission to give it to whomever you choose, so pass it on to as many people as possible!

And if you happen to be a potential investor looking for an idea that could develop into a profit-making venture, get in touch with me, David Bolton, at dboltoncreations@gmail.com

In addition to the idea expressed in this report, I have a number of others that can be successfully combined to create a digital keyboard that would almost assuredly be a best-seller the world over, so don’t hesitate to contact me if you see possibilities for a fruitful collaboration of any sort!.

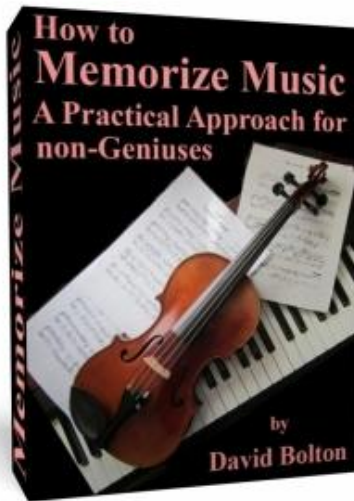
The End

...but we’re not quite finished yet! Move on to the next page for more...

About the author:

David Bolton, musician (harpsichordist), writer, teacher and actor, is the author of the following full-length book which will be of interest to any practicing musician (click the image to learn more):

How to Memorize Music - A Practical Approach for non-Geniuses



Are you a musician? Here are the easiest ways to learn music by heart, explained systematically. Build a repertoire of memorized pieces that you can play any time!

Written mainly for people who play the piano or other keyboard, these techniques can also be successfully employed by other instrumentalists.

If you would like to gradually expand your memorized repertoire, this book is a must-read!

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