# E-reader technology
## at the University of Glasgow

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Imagine it. You're sitting at an organ console, exposed on a very public stage, about to play. You peer at the music and realise that you can't tell the naturals from the sharps. As the concert goes on you become more and more anxious and the music gradually becomes harder and harder to see until you're playing from memory, too anxious to concentrate on the music – just aware that you cannot see.
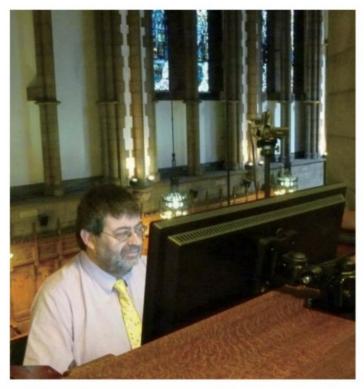
I've always had weak eyesight but now I find it's worse than ever. No, it isn't just that my prescription needs an upgrade, but this is not the place to talk about my medical problems. Tempting though… I could easily fill this periodical with various descriptions, diagrams and photographs. The scenario described above befell me early in 2013 at a very public

event. Actually it was the third time that I'd had such serious difficulties, although that time was the most exposed. I was squinting at the music, screwing my eyes up, trying to cling on to the notes. I was shattered afterwards, depressed and thinking to myself, "that's it then. I can't play any more." I was very despondent.

On the long journey home I remembered a demonstration that I'd seen about a year earlier in the University of Glasgow Memorial Chapel. Gordon and Brenda Cameron had brought their software system, PowerMusic, to the Chapel to give a demonstration to the choir about how we could become free of paper music. It was proposed that each member would have a small tablet, like an iPad, loaded with all their music. No decision was

made at that time as regards the choir, but I started to wonder if this might be an answer for me. So I got in touch with Gordon and Brenda straight away and they came to the Chapel organ loft to give me a demo of what this might look like used in conjunction with the organ. It was extraordinary. I felt that my eyesight was suddenly returned to how it was 20 years ago. The screen was backlit and the text was zoomable. No worries about indistinct accidentals, tired eyes or poorly lit consoles.

Within a couple of months we had the system installed in the Chapel. The existing music rack has been modified so that it can be removed completely and the 27-inch touchscreen e-reader has been installed on its own hinge so that it can be swung into position

**Above:** annotatable screen.
**Below:** full screenshot

**Images to left:** view of the console, back and front

and used in either portrait or landscape formats. It's a miracle and at that time I had only begun to see the possibilities. The system is basically a computer. The computer itself, a small unobtrusive box, sits atop the console. All the music is scanned into the system (I scan the music from the chapel photocopier to my University email account, then import it piece by piece into the computer's memory. A long job if you have 100,000 pieces to import I'll admit, but it doesn't have to be done all at once). Once in the system the pages can be made to look exactly as desired. There are cut-and-paste facilities (so those pesky repeats can all be done away with) and a whole host of tools for editing. Fingerings and other rehearsal marks can be entered either by the virtual, on-screen, keyboard or by the real wireless keyboard. Alternatively, this being a touch screen, it's possible to use a stylus to actually write in the marks by hand.

How is the music organised? You can create "libraries". I have several, thus: "weddings", subdivided into wedding music for organ, piano, arrangements, choral pieces, pop songs, etc. Another "library" is for my "concert repertoire, 2013"

or "2014", "recording projects", "up next – music to look at soon", etc. And the various tags that can be created during the process of building up the libraries allow all the music to be searched by any keyword or phrase – composers' last names, composers' first names, region of origin, year of birth, year of death, nationality, seasons of the church year. Even, if you set them up, things like: shoe size, star sign, or Body Mass Index. Everything is there at the touch of a button (or a few buttons). No more searching for music. If a wedding couple asks me "do you have…?" I can answer instantly. If they've come to see me in the Chapel I can even draw it up and play it to them straight away. Services can be organised into playlists, beginning with the introductory voluntary and running right through to the exit music, never having to worry about where you put the *New English Hymnal* when you went fishing for the psalm.

How many pages can you have on the screen at any one time? You can set each individual piece to display as you want it. A single page can be shown (this is particularly useful in complicated A3 music in portrait format. And 27 inches is bigger than A3, so even this can be enlarged). In landscape format three or even four pages can be displayed simultaneously. If you've got miraculously good eyesight (like Christopher Herrick's!) you can have the lot on screen if you like.

How do you turn pages? A tap at the right of the screen turns the page forward, a tap on the left turns it back. Alternatively an assistant can press the space bar on the wireless keyboard. Even better, there's a friendly red button which can be pressed by foot (or by knee if conveniently fixed under the lowest manual). This is an absolute Godsend. I remember learning Francis Pott's *Christus* back in 2006 and I got RSI during the runs-through simply from the relentless page turning.

It's all so good that I got a second system, a 24 inch touchscreen this time, that I take around with me in a flight case. It sits comfortably on most music racks and means that I can have my entire library with me at all times.

I believe that several such systems have now been sold. I think it is part of the future of the organ. Ideally the screen would be mounted within the music rack (indeed I have seen one such example of this). If incorporated into the organ's own computer registration system, it would be possible to store registrations within the software system. The settings could be loaded into the organ's memory when the music appears on screen. No more tedious setting of pistons or worrying about which levels the organ scholars might be using.

That's my new toy then. It has made my life so much easier. And above all, it really is such *fun to use!*

*Main screenshot*