

DIGITAL PROJECTION IN CHURCHES

Church worship has always been influenced by technology. Even the introduction of electric lighting brought with it a host of questions and considerations – which are still with us!

Recent advances in computer and digital projection technology (both hardware and software) bring into play all sorts of possibilities for improving the effectiveness of communication. We live in a constantly changing culture, which produces a changing medium for communication. As a DAC we seek to support and encourage those who are looking to make use of technology as an aid to worship.

At the same time we must be aware of the effect of any installation on the fabric and architecture of a church building. Some buildings are in themselves an inspiration to worship, and it is essential to consider the effect a modern installation will have on such a 'worship space'.

Consideration must also be given to the fabric of the building. Technology is ever changing and developing, and so installations need to be 'reversible'. (This is true of ANY installation – think how radio microphones have rendered many fixed microphone stands attached to pulpits etc obsolete!)

Fixtures

There are 3 basic components to a digital projection system – A computer, a digital projector and a screen, and the siting of each component has to be carefully considered. Of course it is possible to use a 'portable' system – a tripod screen, laptop computer, and a projector on a stand or trolley. The drawbacks are that most tripod screens cannot be sited high enough for the whole congregation to see, care must be taken to avoid trailing leads becoming a trip hazard, and such equipment must be securely locked away as it is (by nature of being portable) easily stolen. It is therefore assumed that a portable system will only be used on a temporary basis or where infrequent use is envisaged. (It may be a good idea to experiment when possible with moveable equipment to establish the best position for a permanent installation. No alteration, however small, may be made without prior discussion with the Diocesan Registry).

Before any kind of fixed equipment is envisaged, it is vital that the following are consulted:-

- 1) Your Church Architect
- 2) The DAC. As well as 'in house' expertise we can point you to other churches using such equipment.
- 3) Potential suppliers of audiovisual equipment. Technology is constantly changing and they are most likely to be aware of new developments.
- 4) The Diocesan Registry. It is likely that in most instances a faculty will be required

In addition it is important to bring the congregation on board by consulting as widely as possible. It is often the reactions of a 'few' that make or break the installation of new equipment. Experience has shown that taking a few key people along to a church which is making good use of digital equipment is the best way of communicating exactly what is envisaged.

Screens

There is a wide range of screens available. As a general principle the DAC would support the view that a screen should be retractable in such a way as to be moved out of view when not in use.

For a 'chancel arch' screen this will mean retracting into a case or perhaps being pulled up into a roof space. Chancel and screens can also present problems by cutting off the East window and intruding into activity taking place at the chancel steps. There may also be a problem with too much light behind the screen.

Column or wall mounted screens can be hinged to fold flat when not in use. A 'collar' around a pillar could be used to avoid damage to ancient fabric. Wherever a screen is mounted visibility is paramount. In some situations consideration will have to be given to 'repeater' TV screens in side aisles, where visibility to the main screen is impaired. Light is the enemy of all digital projection. Bright sunlight falling directly onto a screen will wipe out the image. Spotlights etc will have the same effect.

Projectors

Light output is measured in Lumens. The higher the output, the greater the cost. Most church buildings will be OK with 1500-1700 lumens. A large building or one with lots of windows will need 3000 or more. The best means of fixing is a single adjustable bar from a roof truss (or similar). UNICOL is the main brand although there are others. Normally the projector has to be on a 90° vertical plane to the screen.

Horizontal 'keystone' is automatically corrected by most projectors. There are 'double keystone' machines (which correct both ways) but they are still fairly new and quite expensive. Projectors are normally controlled from the computer.

Computer

Digital projection offers a wide variety of uses. Hymn/song words, liturgy, and Bible readings can all be projected (think of the flexibility!) as well as video clips, diagrams and sermon notes. If all these uses are envisaged then the best solution is probably a 'desk top' computer hard wired into the system. Remember graphics need a lot of memory and a good operating speed. Some programs need a dual head graphics card in order to project.

It is important to use the correct software – especially for hymn/song projection. There is a good deal of discussion regarding how much of a hymn or Bible reading is projected at any time. Obviously the more 'words' there are on a screen the smaller the font size (so the harder it is to read) It is therefore a case of experimenting in every situation to balance local need with local preference.

If there is a need to use a computer say in the pulpit for sermon illustration in addition to the projection of 'words' consideration could be given to having an additional 'laptop' for this purpose connected directly – most projectors have 2 'RGB' inputs.

Cable

A computer etc will need several 13a sockets (especially if a DVD and VCR are included). The projector will need a 13a socket nearby (or a 5a fused spur). Connection between computer and projector requires a cable for the RJB signal, plus a video cable (if required) and an RJ 45 cable to handle projector controls. It is evident therefore that these systems produce a lot of cable – which needs to be fixed/concealed – not just for neatness but also with health and safety in mind. There are also issues of interference and IEE wiring regulations to be borne in mind – so it is important to get the correct advice.

The introduction of digital projection is a growing and valuable contribution to the life and worship of the church. There will always be those who will prefer the 'written word' for use within worship but at the same time we must be ready to consider other forms of presentation which can, when used correctly and sensitively, enrich and inspire worship.

Procedure

After proposals have been developed with the informal help of the DAC the final proposals should be formally submitted for formal DAC consideration. When the parish has the formal DAC certificate it will be ready to seek legal advice from the Diocesan Registry at 56 North Bondgate, Bishop Auckland, DL14 7PG Tel 01388 603073.

Durham DAC

4 May 2006