# OXYGEN™
## multimedia ministries

# *Equipment Information:*

If you are just getting started with multimedia at your church, your first question is probably about equipment. This list will provide you with the basic components and information regarding making equipment choices for your multimedia department.

Here is a list of the basic equipment you will need to run a multimedia presentation:

- Computer
- Software
- Projector
- Projection screen
- Cables

**Computer Hardware:** *Minimum requirements (Recommended)*
Computer with a CD-ROM drive.
Pentium III, 333MHz, 256MB RAM (1GHz, 512MB RAM or better)
Apple PowerMac G3, 500MHz, 256MB RAM (G4, 1GHz, 512MB RAM)
Solid power supply to run this equipment.

**Software:**
### Windows®
You can use any operating system (98 or newer)
PowerPoint® files require Microsoft® PowerPoint 95 or newer.
Can be used with other media presentation software.

### Macintosh®
MacOS 7.1 or newer (OSX 10.3)
PowerPoint files require Microsoft PowerPoint 97 or newer.

**Purchasing:** *Some tips on projector & screen buying*

### 1. Brightness
Brightness on a projector is measured in ANSI (American National Standards Institute) lumens: the brighter the projector, the higher the ANSI lumens number.

If you are presenting in a small dark room with only a few people viewing, then you will probably only need something with 500-800 lumens. The larger your audience is, the bigger you will need to make the projected image. Projecting a bigger image will take more brightness to illuminate it evenly. You will also need to consider any house

lighting in the room, because your projector will need to overpower these influences. The main thing to remember is: the higher the number of lumens, the brighter the projector. Lumens will range from 500-12,000. Check with your local dealer for advice about your situation.

## 2. Resolution

True resolution of a projector is the resolution the projector was designed for, such as SVGA (800x600) or XGA (1024x768). Higher resolution projectors show more picture detail and have a smaller pixel, so the pixels themselves become less visible. You will pay more for higher resolution. Lower resolution projectors can produce images that are just as bright as higher resolution projectors but cost less.

*Which resolution do I need?*
- For most worship settings and general business-type applications, SVGA (800x600) resolution is acceptable.
- If you are presenting things like spreadsheets with lots of figures and numbers, XGA (1024x768) format will probably suit you better.
- If you are projecting highly detailed drawings or images of high detail, SXGA (1280x1024) will do an acceptable job.

## 3. Portability

If you are going to be taking this with you from place to place, you want it to be light. However, don't sacrifice brightness or resolution for weight unless you can justify it.

## Projection Screen:

This can have an effect on the quality and brightness of the images being projected. Most of the newer projection screens provide excellent light reflection. You should choose a screen based on size, cost and performance.

## Setup: *A walk-through for getting started*

Set up your work station so that you will have plenty of room for your computer, projector and a person to easily get in and out.

## Connecting a Laptop Computer to the Projector:

Connect the VGA cable from the video card on the computer to the projector. Check with your local projector dealer for correct cabling from your computer to projector.

## Dual Monitor Setup for a Windows Laptop:

Go to the Start menu >> Settings >> Control Panel >> Display >> Settings >> Advanced >> Look for a tab that says twin view, dual monitors or dual display. The brand of graphics card installed on the computer will influence the terminology that is used. Once in this window choose "Clone" >> Apply >> OK and close any other windows. The projector should now show exactly what is on the computer monitor.

**Dual Monitor Setup for a Desktop Computer Running Windows:**
Due to the many differences between software/hardware manufacturers' specs, actual wording of the menus may vary. Please consult your video card manual for instructions on setting up your specific system. Here is one possible scenario:

Click with the right mouse button on the desktop of the computer screen. A pop up menu will appear. Click on Properties >> Settings >> Advanced >> Then click on the tab with the name of the video card on it. For instance "GeForce2 MX/MX400." Look for a place to choose Single display, Clone or Dualview. These may be located in a pull-down menu. Single display will only display on the computer monitor and there will be no signal out to the projector. When you set your computer to "Clone" mode, your computer will do as it implies and show the exact same thing on the projector as what is seen on the computer monitor. Dualview allows you to have the second monitor as extra "real estate," or extra desktop space. This is the optimum mode for live projecting. Once you configure PowerPoint correctly, you can show the full-screen presentation on the projector screen, but have presentation view on the computer monitor. If you would like to learn how to do this, read the next section: "How to Set Up Presentation View."

**How to Set Up Presentation View:**
With PowerPoint open, click on Slide Show >> Set Up Show >> On the right-hand side in the third box down you should find "Multiple Monitors." There you will find a pull-down menu where you will click on "Monitor 2 Default Monitor" and check the box beside "Show Presenter View" then hit OK. Now hit the F5 key or the Slide Show (from current slide) icon down in the bottom left corner. F5 will always start at the beginning of the slide show. Now PowerPoint "Presenter View" should load and show on the computer monitor and the projector should be showing the full-screen presentation.

**Connecting a Desktop Computer to the Projector:**
On desktop computers that only have a single monitor video card, you will have to unplug the computer monitor cable and hook up the cable from the projector to the back of the computer. By doing this, the projector becomes the only output source. To get a dual display on a desktop computer, you will need a second video card or a video card that is capable of dual display. Connect the computer monitor to one port and the projector to the other port on the video card on the back of the computer. This may need a cable adapter. To set up the dual monitor in the computer follow instructions for "Dual Monitor Setup for a Windows Laptop."

**Setting the Resolution on a Windows Machine:**
Consult the instruction manual to find out the true resolution of the projector.
Now to set the resolution, go to the Start menu >> Settings >> Control Panel >> Display
>> Settings >> The Screen Area is where the slider is. Slide the slider to the pixel size of
the projectors true resolution.  >> Click Apply >> A window will pop up and tell you that it will
now apply the new settings. >> Click OK. >> Another window will pop up. >> Click Yes.
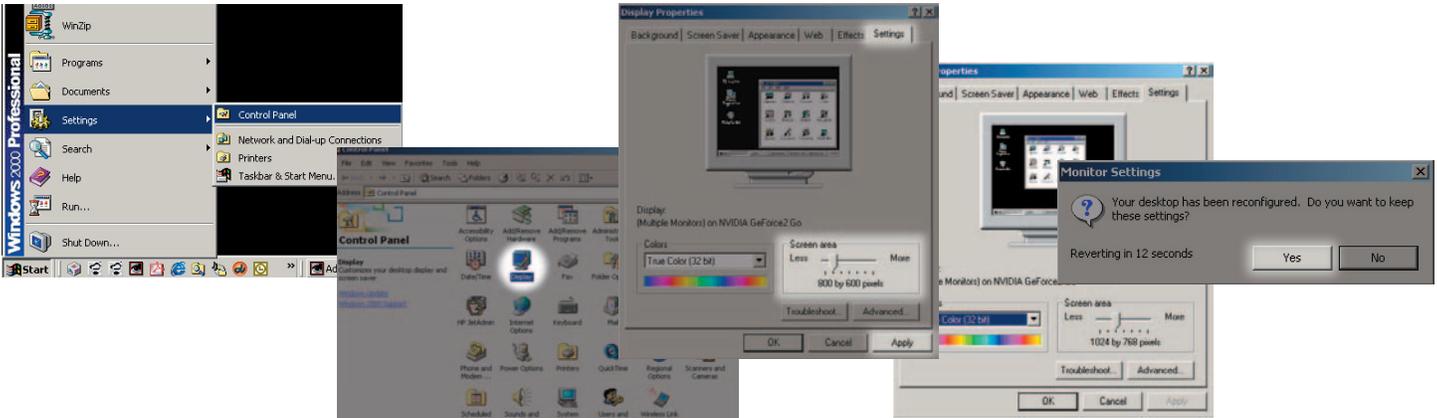


If you don't know what the true resolution of the projector is, try a couple different
settings and see which is the sharpest. More than likely it is SVGA (800x600) or XGA
(1024x768).

**Getting the Computer and Projector to Talk to Each Other:**
Because every projector has a different way of receiving signal from your computer, use
the projector's instruction manual to set it up.

**Calibrating the Screen:**
Once you have the computer sending an image to the projector, you should calibrate your
projection system. For more information on this topic, use the Oxygen Screen Calibration
Chart in the Extras section of the Multimedia Starter Kit.

Click this button to load the Calibration Instructions