Best Practices for Screens & Projectors

Over the years, there have been many “learnings” for creating an inviting environment in your room for the event. This document looks at the best practices for projection for all site types, whether you are using your gear or rental gear. GLS veteran TDs and Producers have helped write this and given some key advice. We’ll go over the following:

- Controlling Ambient light
- Single Center of Focus
- Screen placement, head room & sight lines
- Projector Advice
- Set-up
- Testing your full-path, event systems

Control Ambient Light

It may be a no-brainer, but being able to control the ambient light from windows or overhead lights is key to good projection. Keeping light off the screen will give the best output from the projector. If it is possible to cover windows or reduce room lighting, please do. We realize that not all rooms have this ability, so do the best that you can with what you have.

*Keep as much light off the screens as possible. An underpowered projector can look great and good projector can look bad if the lighting is incorrect.*  
— Gus P.
Single Center of Focus

Many locations have side screens that are used on a regular basis for weekend services or events. Side screens can be a great tool in a church service, however folks are only looking at them for a portion of the service, which is usually around 1 hour long. The GLS is a two day event, 8 hours a day! We have found through much experience that having a single center of focus (aka, a center screen) provides an environment that is focused and mentally relaxing. If the sites pictured below had all 3 screens going, it would be the equivalent of TYPING IN ALL CAPS FOR TWO DAYS – very emotionally exhausting. Therefore, we suggest that side screens not be used in addition to a main, center screen such as in the examples below. Using the side screens for a logo during the session or for post-session announcements is OK.
Screen Placement, Head Room & Sight Lines

When placing your screen, try to place in the center of your stage, towards the front. It is important to check sight lines and be sure there is enough headroom when the attendees are standing up for worship (see example below).

Double check your sightlines to make sure everyone gets a decent view, or to know how many seats are "less than ideal".  - Sean @ Central Christian

Projector Advice

Whether you are using a rental projector or not, these tidbits from veterans can prove very helpful for a 2 day event.

Make sure you have the proper distance measured out to ensure where to place screen/projector and have plenty of volunteers/staff planned to safely raise/lower pack gear.
– Jon H.

Keep filters clean, make sure projectors can breathe. – Jim @ Parkade Baptist

I've seen a lot of posts on FB where people have mounted their projectors, especially rented ones, in crazy ways... They should be placed on SOLID surfaces.  - Mike W @ Orchard Hill

Have spare projector bulbs on hand & follow projector manufacturer's guidelines on projector cleaning & maintenance.  - Mark H. @ Zion Clear Lake

Level the projector horizontally as the first adjustment to aiming (assuming that the projector is sitting direct on from the screen on the horizontal plane). Minimal keystoneing should be done.
– Mike W @ Orchard Hill
**Set-up**

If you are using a rental, be sure you have time, people and resources to get them set-up. The rental gear from the WCA usually comes the week before the event, which provides ample time for set-up. There are tests on Monday and Wednesday of event week, therefore it is beneficial to have them set-up and ready for both tests. This will give you ample time to troubleshoot if necessary. If using rental gear, check for all pieces and a correct lens as soon as the gear arrives, even if you can’t set it up right away.

*Set [the rental gear] up as soon as you can to see if anything is broken or missing.*
– Clint @ Thunder Mountain

*Always do a test an hour before the start of each [event] day.* -Deacon Dudley @ FCCNR

For screens, be sure you have a clean floor when assembling. One of the biggest reasons for damage to the screen is debris on the floor that pokes holes into the surface. The second most common cause for damage is bent leg frames. This can happen by not having enough hands to help raise the screen (watch your ceiling) and it becoming top heavy and falling. Damage costs are covered by the site, so be extra careful and handle with care!

*Set up early and test often!* – Hannah @ Christ United Methodist Church

*Set them up and test early!* – Greg @ Hillcrest Church
Testing Your Systems

*Set them up [screen and projector] as soon as you can to work out any issues that might arise.*

– Sherry @ Community Christian

For any of the broadcast tests, if it is possible, project the broadcast using the full-path and gear you use for the GLS. If you are using rental gear for the GLS, there are tests the week of the event in which your site will be able to have all rental gear in place for testing.

It has also been suggested to sketch out your system so you can identify how you’ll switch from satellite to webstream (if not a webstream only site).