

Church Production Magazine

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WFX ISSUE



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Choosing a Moving Light

By Greg Persinger



Tips for making that first (or next) automated-fixture purchase

Although automated lighting fixtures have been around in one form or another since the 1950s, the technology needed to make them a viable tool for use in the lighting industry didn't appear until the late 70's and early 80's with the introduction of affordable microcomputers and integrated circuitry.

On September 25, 1981 in a bullring in Barcelona, Spain an astonished audience watched 50 Vari*Lite VL1 fixtures move and change color as the VL1 debuted on the rock group Genesis' "Abacab" tour.

What the audience didn't realize was that they were watching a historic moment in lighting history, as the VL1 would revolutionize the concert lighting industry with the inception of moving lights.

With all of the different makes and models of moving lights on the market today the purchase price of the fixtures has gone down and moving lights in the church are becoming more commonplace. This has led to one of the most common lighting questions I get asked: "Which moving light should I buy?"

While this is a good question to ask, I liken it to asking a car salesman what kind of car you should buy. Without any information on the specific features you want and what kind of performance characteristics you need, it is hard to give good advice.

**PRIMARY WAYS
MOVING LIGHTS
CAN BE USED ARE
EFFECT LIGHTING,
COLOR WASHES,
FOCUSABLE
SPECIALS, OR
PRIMARY STAGE
LIGHTING.**

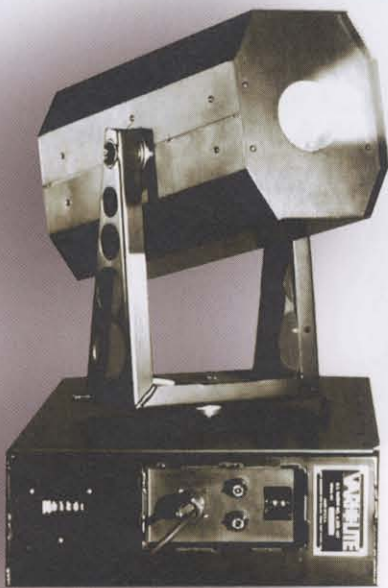


Photo courtesy of Vari*Lite

In 1981, the Vari*Lite VL1 fixture pioneered the modern moving light industry, setting a new standard for concert lighting.

Moving lights can provide colored backlighting, paint hazed air with light beams, and can greatly affect the mood of the room.

Automated lights can be used in several different capacities in a lighting rig, and how they are used makes a difference in what features you need in the fixture.

EFFECT LIGHTING

Using moving lights for effect lighting has been the primary use for automated lighting. Typically a lighting designer will use a compliment of moving lights along with a conventional lighting rig to light the stage.

The moving lights can be used as beam effects (patterns of light that show up as the light beam travels through air filled with a theatrical haze), to lighting drape and scenery with colors and patterns, or as colored backlighting on an actor or singer.

Traditionally the fixtures used for effect lighting have been profile or spot-type fixtures that have a focusable hard edge to the light beam and can project patterns. These fixtures are also typically lamped with arc lamps.

THE NAME

“INTELLIGENT LIGHTS” IS A MISNOMER; THERE ARE ONLY INTELLIGENT PROGRAMMERS. WITHOUT SOMEONE SKILLED IN THE OPERATION OF MOVING LIGHTS, THE LIGHTS WILL SIT THERE AND DO NOTHING.



COLOR WASHES

Using moving lights for color washes is another dominant use of automated lights. Typically the lights used for color washes are soft-edge fixtures having a beam characteristic similar to a PAR can or a Fresnel, and are generally used in place of these fixtures for a color wash. Many designers will use them as a rear or backlight color wash, as sidelight, and sometimes as front color washes. An automated wash light might be lamped with either an incandescent or an arc lamp depending on the fixture and its use.

FOCUSABLE SPECIALS

Automated lights used as focusable specials are almost always profile or spot fixtures. These fixtures are hung as you would a front light and allow a few fixtures to cover many different focus positions throughout a program. This allows for smaller numbers of fixtures to be used to cover a large number of focus areas, assuming you don't need to light all the focus area simultaneously.

These fixtures are typically lamped with an incandescent lamp but can be lamped with arc lamps as well.

PRIMARY STAGE LIGHTING

The current trend in concert lighting is to use a fully automated lighting package to light the stage. This gives the designer maximum flexibility in color, patterns, and multiple focus positions as well as the ability to achieve numerous effects. Typically the automated lighting fixtures used for concert lighting are lamped with arc lamps.

OTHER FACTORS

Other factors that play into your choice of moving lights are the room size, lamp choice, and budget.

Room size requires choosing a light with an appropriate throw distance. For example, if your lighting hang position trim height (the final, adjusted position of the batten or hang point) is only 16-feet from the stage floor, a 250-watt arc-lamped fixture would work well as it would be bright enough and have enough

beam width, while a 1,200-watt arc-lamped fixture might be a bit large. However, in a room with a 40-foot trim height, a 250-watt arc-lamped fixture would be a bit small.

In room size, another factor needs to be considered: the scale of the room.

The number of fixtures you use is based on how many fixtures it takes to light the platform or stage. In a small room, six or eight automated lighting fixtures may be plenty to accomplish your lighting goals while in a large room you may need 20 or 30 fixtures to accomplish the same thing. This idea of scale ties directly into budget.

Each moving light costs money — anywhere from \$2,000 for a small fixture to \$9,000 or more for a large fixture with lots of features. If you need 20 automated fixtures, you could easily spend \$150,000 on just the automated lighting fixtures.

And then there is lamp choice. Should you go with an incandescent version or an arc-lamped version? This will all depend on what you are trying to light, how you are using the fixture, and if you are trying to match the color temperature of other fixtures for theatrical or TV purposes. If you are just using the fixtures for effect purposes then stick with the arc lamp, as you will want the extra brightness that the arc lamp provides. If you are using the fixtures for a rear color wash then the arc lamps will also work well. If you are using the fixtures for a front wash or for focusable specials you might want to consider incandescent lamps.

One reason for considering incandescent lamps is that arc lamps tend to have a lot of green and blue components in their light output. This means in open white, the people being lit will tend to take on a green-

ish tint. Green skin tones are not good to look at, as we tend to interpret what we are seeing as a sickly person. This can sometimes be corrected with a color-correction filter in the automated fixture, but using an incandescent lamp as the light source eliminates this issue.

Another reason for using an incandescent lamp for front light washes or focusable specials is to match the color temperature of an existing incandescent lighting rig for television.

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BUYING ADVICE

Once you have determined what you plan to use your automated lighting fixtures for, it's time to get down to the business of making the purchase. I advise my clients not to buy automated fixtures if their current conventional lighting rig isn't in good shape. If your current lighting system needs repair or expansion, addressing this should be your first priority. Unless you are going to replace your full lighting rig with automated fixtures, moving lights should be considered an addition to your conventional lighting rig, not a substitution.

Secondly, if you have never used moving lights before, rent a moving light rig and hire a programmer to program for you. Spend some time assessing the impact the moving lights make on your service or program as well as the amount of time

the programmer spends making the moving lights work. Also spend a bit of time learning about the technically complex programming process.

Who will be your programmer/operator? Do you have a staff person or volunteer that can do your lighting programming? Will you hire a programmer to program for you and have a volunteer operate the lights during the service? The name "intelligent lights" is a misnomer; there are only intelligent programmers. Without someone skilled in the operation of moving lights, the lights will sit there and do nothing — or worse, be a distraction from the message of your service or event. A good programmer can make a huge difference in the look and feel of the moving lights in your service.

A third piece of advice: Do you currently have the infrastructure to run a moving

light package? Do you have the power, data cabling and the space to hang moving lights? Will your current console support the moving light package or will you have to get a new lighting console?

Last, are you financially able to maintain a moving light rig after the purchase? Moving lights need to be maintained and do break down — and repairs are much more expensive than for a conventional lighting fixture (see "Care and Feeding of Moving Lights", CPM April 2006 issue).

Look at buying name-brand fixtures that have a good durability and serviceability record. Buy from companies that can service the fixtures after the sale. Also consider sending a person to the manufacturer's training seminars to get trained on basic maintenance and service of your particular lighting fixture.

Once you choose the fixtures you think you want to purchase, have the lighting company demo the light in your room to make sure it does what you want it to do in your space.

Remember that a moving light rig is an investment, as you are going to be using it for the next five to ten years. So, make sure you purchase what you need. If you can't afford to purchase what you need, then look at purchasing used equipment, renting or leasing.

You may not be making lighting history as the rock band Genesis did 25 years ago, but you might be able to bring the biblical story of Genesis to life in a new and exciting way to a 25 year old.

Greg Persinger is a principal consultant with Design 2020 Church Media Consultants and has been an automated lighting tech and programmer for the past 14 years. He can be reached at greg@design2020.com.

— END —

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