

# Hitting the Spot

By Lisa Mulcahy



Comet Followspot, Altman Lighting



The Lycian Super Clubspot

Time to retire that followspot? Here's how to evaluate your equipment so it's right for your venue's needs.

**Y**ou could swear your theatre's been using the same followspot since *Hair* was a fresh, hip new musical. And, after all this time, you and your lighting crew still aren't precisely sure whether you're working that followspot to maximum advantage. Has the beam ever really been bright enough to command effective stage focus? Have you measured your stage dimensions accurately so that the spot is actually right for your space? Is your spot giving you acoustic headaches? Is it bulky and awkward to move and operate? Has it just been too darn expensive when you factor in the frequency of its production usage?

The followspot can be a tricky tool to use, choose and evaluate expertly. But with the following eight rules, you can choose and use your followspot to its best effect.

## 1. See Whether Your Spot Is Salvageable

For most theatre companies, a followspot is an essential tech component, but one that isn't necessarily used in every production — many venues keep their spots stored for a good chunk of their season. If your spot is left unused for stretches of time, don't automatically assume that you need to replace it just because it's an old model. It could still have a long, workable lifespan ahead. A good equipment inspection is key.

"You need to determine whether your followspots need to be replaced or just serviced," advises Todd Koepl, quotations and marketing manager at Chicago Spotlight Inc. "If your equipment has never been serviced before, it might need a new lamp, but it also might just need cleaning."

Have your lighting designer and/or master electrician put the equipment through its functional paces. Your in-house expert has been working with the spot the longest, so they are in the best position to observe whether the spot is losing its beam strength, has frayed wiring or is starting to cut out. Ask your expert to test run the equipment in your space from the same operational point in your house where it has always been used and to make note of changes in its operational quality. Also, ask your expert to visually check whether the equipment appears to need cleaning or repairing, and rely on their advice.

Some crucial components of a followspot indicating good working condition:

- The spot's lamp light source should provide strong, clean lighting without overheating.
- The spot's iris should effectively shift spot size and projection angle with ease.
- The spot's lens train should readily focus as the operator sees fit.
- The spot's boomerang and attached gel frames should allow for easy changing of color.
- The spot's built-in dimmer or attached dimming device should allow for an appropriate range of beam intensity options.

If some maintenance is all that the doctor orders, call your dealer or a professional lighting company in, and — best-case scenario — your spot should work like new.

## 2. Leverage Your Location

If your in-house lighting experts indicate that your followspot is operationally faulty, however, you will definitely need to invest in new equipment. It's important to select with care. "You need to do a little homework," says Ken Billington, the Tony award-winning lighting designer of Broadway's Chicago, as well as High School Musical. "The best way is to talk to an expert source. Call a professional company, speak to a technician about your needs and rent a followspot — you want to see it in your space before you buy it."

To give your pro the opportunity to outfit your venue with the right spot, you've got to break down exactly how you intend to use it. "How is the followspot going to be used — will it be moved a lot, or not moved at all?" asks Koepl.

Conversely, Billington offers, "Should the equipment be permanently installed?" Ask yourself and your lighting staff whether the venue location in which you've had your spot centered is really working for you, or whether you might want a more mobile situation. (Most venues anchor spots in the rear balcony or operate them via the projection booth, but you can choose a movable unit as well.) Also, make sure you're positioning the spot correctly; followspot positioning guidelines are available on ESTA's Web site ([www.esta.org](http://www.esta.org)).

Keep in mind that any mobile spot you choose should be lightweight enough to be moved or positioned easily and shouldn't be so bulky that it hampers your designer's efforts to angle it as desired.



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### 3. Know Your Throw Distance

"Knowing your space is key," stresses Koepl. "What is the throw distance of the venue?" Simply defined, throw distance is the measured space from the followspot to the stage portion that will be lit. If you measure this dimension incorrectly, you can easily choose the wrong piece of equipment.

You can determine throw distance yourself by running a laser tape measure from spot to stage area in a straight line. A second method is to simply attach a piece of rope or string to the spot and extend it to meet the stage area, then measure how long it has unfurled. Your throw distance measurement should be one of the first pieces of accurate information you give your lighting pro.

### 4. Pay Attention to Intensity

A followspot that is too bright or not bright enough can ruin the entire effect of a stage picture, so it's crucial to understand what proper spotlight intensity is right for your space. "You need to decide what's going to be right in terms of the energy your venue has," says Billington. "The way to do this is to experiment — put the followspot in your balcony, check its brightness. A followspot should be brighter than your stage lighting. You can use a light meter to help you decide what looks right as well." If you need a brighter effect, an arc lamp could be the right choice, or for a more subtle effect, you could choose an incandescent.

A standard range of 100 to 150 foot candles will work for many different stages and production FX, but your lighting pro can advise you on how your throw distance and use of accessorizing equipment such as filters or lamp energy will affect your choice of spot.

### 5. Respect Your Restrictions

Even if you find a followspot meets much of your criteria, you might still have to keep looking. What's the ultimate deal breaker when choosing a new spot? Your power source. "A lot of theatre personnel will go to a trade show and become enamored of a new followspot on the market, but the product just isn't right for their venue," says Koepl. "You have to consider everything — starting with what your power can handle. You can't suddenly bring in a followspot if you don't have the electricity setup to handle it."

Another just-gotta-say-pass consideration: a followspot that's just too loud when operating. Don't take your spot's noise with a grain of salt. Test it acoustically by running some loud playback (say, of music recorded from a previous pro-

duction) through your sound system while running the spot. Keep ratcheting up the volume knob to see how much house noise is actually compromised by the spot's operation. Check this by moving to different sections of the audience seating yourself. Don't settle on any spot that doesn't provide a smooth lack of sound interference.

### 6. Be Real About Your Budget

"A followspot is a capital purchase," says Koepl. "You can go the inexpensive route, but you get what you pay for." It's definitely wise to spend for quality, but make sure you leave room in your budget for the essential extras: replacement lamps, stands, yokes, irises, boomerangs, handles and a gel color selection.

Keep in mind, too, that the type of productions your venue presents will have an impact on what you should realistically spend on your spot equipment. If you have a number of musicals planned, for instance, that alone could double your spot budget — you will probably want two followspots instead of one and, of course, that will require the duplicate purchase of most of your accessories to ensure you always have enough working equipment on hand. As early in the process as possible, make a full list on your computer or on paper of everything you need. "If you're looking through product catalogues or Web sites, I don't think you can look at prices," remarks Billington. "Identify what you need first." Also, if renting a followspot for one or two productions makes strong financial sense, definitely proceed that way.

### 7. Stay Safe

Followspots can be among the most hazardous tools any theatre techie will ever handle. Take, for instance, the xenon lamp — its light can burn beautifully bright onstage, but can cause real harm in even experienced hands. "A xenon lamp is virtually a hand grenade," says Koepl. Xenons present a major burn risk due to their pressure-packed lamps, which are seriously hot. "I think for the nonprofessional market — educational theatre venues, for instance — there should be no use of a xenon," warns Billington. "If somebody opens that up, it can explode. A xenon is *dangerous*."

Another important point: Never try to cut corners by purchasing "vintage" spot equipment through online sources — you will be taking a major safety risk. Carbon arc lamps, for instance, were used right up through the '90s and had to be equipped with ventilation components to prevent noxious carbon fumes from building up while they were in use. When

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Cyrano, Robert Juliat USA

in doubt, never chance safety. Spend the extra money you need to ensure your spot equipment is safe, operate it as your lighting pro stipulates and always have repairs made by a factory-trained technician.

### 8. Optimize Your Operation


When you do finally have the follow-spot equipment that's safe and right for your venue, be careful who you authorize to use it. "Who is operating your followspot, and what is their experience?" asks Billington. A light board op who doesn't know what they are doing could damage your spot and cost you serious cash. Also, there's no way your production won't suffer if your spot's in the hands of an amateur. "You don't want your operator monkeying around with lamp placement and reflectors — you're not going to get it to look right," Koepl points out.

The following checklist can help make sure your followspot op — and your equipment — work at the top of their games.

- Include your operator in all discussions/demos with your lighting

pro throughout the equipment selection process.

- Remind your operator of where the spot **shouldn't** shine: on the lip of your stage, on the curtains, in too wide a circle so an excessive amount of the stage picture is lit.
- Be sure that the operator fills the spot with an actor's head-to-toe position and that they quickly and smoothly follow an actor's moves.
- Make sure your operator keeps the beam steady, with no shaky movement.
- Check to ensure that your operator isn't letting the end of the spot's beam dip sloppily at any point on the stage.
- Encourage your operator to speak up and ask questions at any time. That's good advice for you to follow as well — any good lighting pro will be happy to address even the smallest concern.

Armed with this info you should be able to get your op and spots working in brilliant harmony. 

## Manufacturer 411

Check out these popular followspot manufacturers to explore your lighting pro's specific recommendations.

**Strong Lighting**  
4350 McKinley Street  
Omaha, NE 68112  
800.424.1215  
www.strong-lighting.com

**Altman Lighting**  
800.4ALTMAN  
www.altmanltg.com

**Robert Juliat USA**  
48 Capital Drive  
Wallingford, CT 06492  
203.294.0481  
www.robertjuliatamerica.com

**Lycian Stage Lighting**  
P. O. Box D  
Sugar Loaf, NY 10981  
845.469.2285  
www.lycian.com