HMI Lights

How to use an HMI safely

Rule 1. First make sure the instrument and the ballast are turned off and NOT plugged into an outlet before connecting or disconnecting ANYTHING.

Rule 2. The electrical outlet is the LAST thing you connect and the FIRST thing you disconnect. In other words, when you are hooking up, connect the lamphead to the ballast first, then connect the ballast to the AC source (outlet). When you are unhooking, make sure the power is OFF on the light BEFORE unplugging from the outlet. The last thing you do is disconnect the ballast from the lamp head -- but only if the power is OFF and the light is unplugged from the outlet.

Rule 3. Make sure everything is properly grounded BEFORE you turn anything on. Some HMIs have a ground test switch. Use it.

If a light is not properly grounded, the ignition spark could pass through you instead of through the lamp. In the case of a 1.2 HMI, the ignition spark is in excess of 35,000 volts! Some HMIs have a breaker. Keep it turned OFF until you are ready to turn the light on. When you turn the light OFF, turn the breaker OFF also.

Rule 4. Once you turn on an HMI, you must leave it on for 5 minutes to allow the lamp to warm up properly.

Rule 5. HMIs should not remain on for longer than 30 minutes. Some HMIs will turn themselves off after 30 to 45 minutes.

Rule 6. NEVER plug an HMI into any circuit that has a dimmer on it. If you use an HMI in an RTF studio, plug into the wall NOT the grid.

Important Note: When testing HMIs, make sure you follow the correct procedure for connecting them, and once they have been fired, leave them on for at least five minutes. IF YOU ARE NOT ABSOLUTELY CERTAIN OF HMI PROCEDURE, REFER TO THE INSTRUCTION SHEET AVAILABLE IN EQUIPMENT CHECKOUT BEFORE YOU TEST OR USE THEM.

How to test an HMI
Chek the cables.

Are there any bent pins?
Do you have the correct cable to fit the HMI you are using?
To Test: Make sure the instrument is turned off before plugging it into the ballast and turning it on. Once you turn on an HMI you must leave it on for at least 5 minutes. Turn it on, and test the focus mechanism if applicable. Make sure barn doors (if any) fit and work properly. Request safety cables for instruments which are to be mounted overhead. For lights with Fresnel lenses, inspect the lens for cracks or chips. Report any damage to the Equipment Room staff and make sure it is noted on your Loan Agreement. **DO NOT USE A GROUND LIFT WITH AN HMI THIS IS VERY DANGEROUS.**

**Important Note**

The use of HMI lights is restricted to students who have had proper training (classes to whom HMIs are allocated). When testing HMIs, make sure you follow the correct procedure for connecting them, and once they have been fired, leave them on for at least five minutes. **IF YOU ARE NOT ABSOLUTELY CERTAIN OF HMI PROCEDURE, REFER TO THE INSTRUCTION SHEET AVAILABLE IN EQUIPMENT CHECKOUT BEFORE YOU TEST OR USE THEM.**

**Helpful Hints**

Lighting is the area which poses the most potential danger to careless operators.

When checking out lighting equipment, special care must be taken to examine cables, switches and plugs for loose or frayed insulation or exposed wire.
Check for loose or missing parts.
When using lights be aware of the heat generated by them to avoid burning objects placed nearby, especially cloth diffusion.
Keep liquids away from all electrical equipment.
Let the HMI cool down before you attempt to put it away. If it is still warm when put away it can melt the wire, making the wire unsafe. You can also burn your hands.
**NEVER** touch a bulb with your bare hands. The oil from your hands, even "clean" hands, can cause the bulb to blow up when it gets hot. When replacing a suspected "bad" bulb, use gloves.

**Troubleshooting HMIs**

**Problem: HMI will not strike.**

1. Is it plugged in?
2. Is it plugged into a functional outlet?
3. Are all the cables properly connected?
4. If this HMI has a ground test light, did it come on?
5. Are you using a “ground lift”? DO NOT USE A GROUND LIFT WITH AN HMI THIS IS VERY DANGEROUS.

6. Does this HMI have a breaker? If so, is it in the “ON” position?

If your HMI was “working fine earlier” and has stopped working check the following:

If it is a Mole Richardson 575 or 1.2, check to be sure the safety latch has not slipped out of position. Here’s how:

1. Turn the power OFF and if the light has a breaker, turn that “OFF” also.

2. Open the light fixture (there should be a silver knob on the front side of the lamphead near where the barn door attaches. Pull down on it. The front of the light should swing open. If it does not, perhaps you have the light mounted upside down? If so, correct that, then pull down on the knob. Look inside BUT DO NOT REACH INSIDE. *Is the bulb broken?* If not, close the door back up and jiggle the latch to be sure it is securely closed. This latch can work itself open from gravity and from expansion caused by heat. Turn the light on. **NOTE:** Please do not mess with the bulb in any way. 99% of the time the problem is not with the bulb. These bulbs are expensive (about $500) and they last a long time (a year or two).

**How long did you have the HMI turned on?**

You should not leave an HMI turned on for more than 30 minutes. If you left it on for an hour and it turned itself off, this is normal. Leave it off for at least 20 minutes before you try to use it again.

Once you turn an HMI on, leave it on for at least 5 minutes before turning it off.

**MAKE SURE YOU OPEN THE BARN DOORS WHEN YOU STRIKE THE HMI!**