## SunMaster ClearTech 120R & SunHorse High Frequency Ballast Systems
## Special Application Wiring Diagram & Product Information

There are two basic ways to wire the ClearTech 120R and SunHorse ballast: HO (high output) mode and VHO (very high output) mode. Wiring the lamp in VHO mode will greatly increase the total output of the lamp, but will reduce the lamp life. Typical life of the ClearTech 120R (as measured with the lamp being at 70% of original UV output or greater) is 1000 to 1200 hours in HO mode, and is estimated to be 700 to 900 hours in VHO mode.

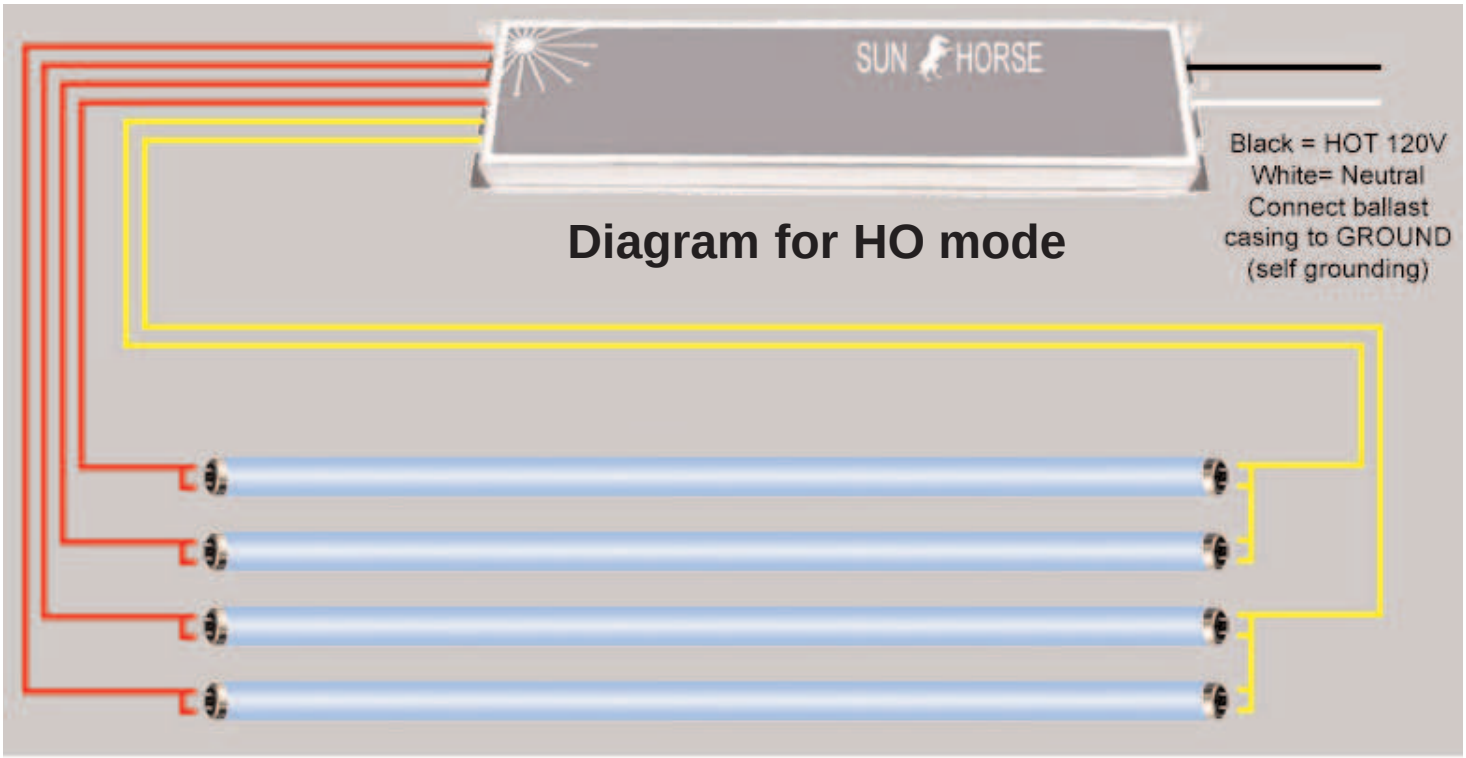



**Diagram for HO mode**

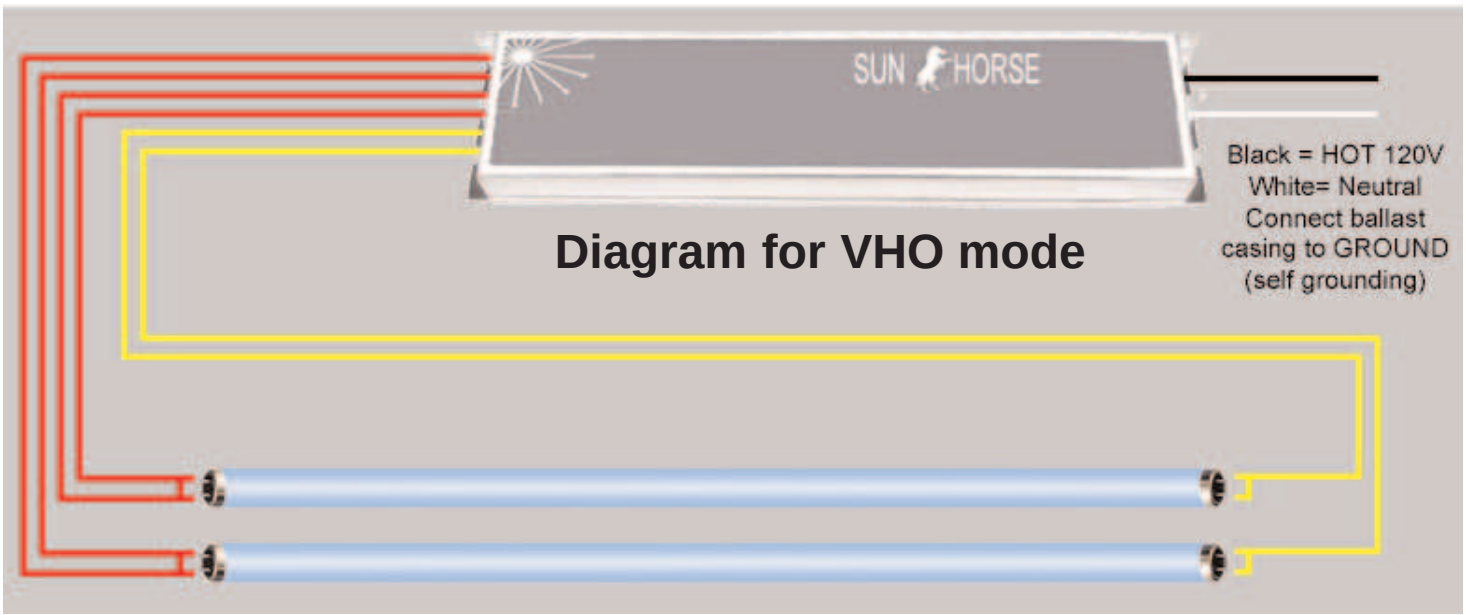
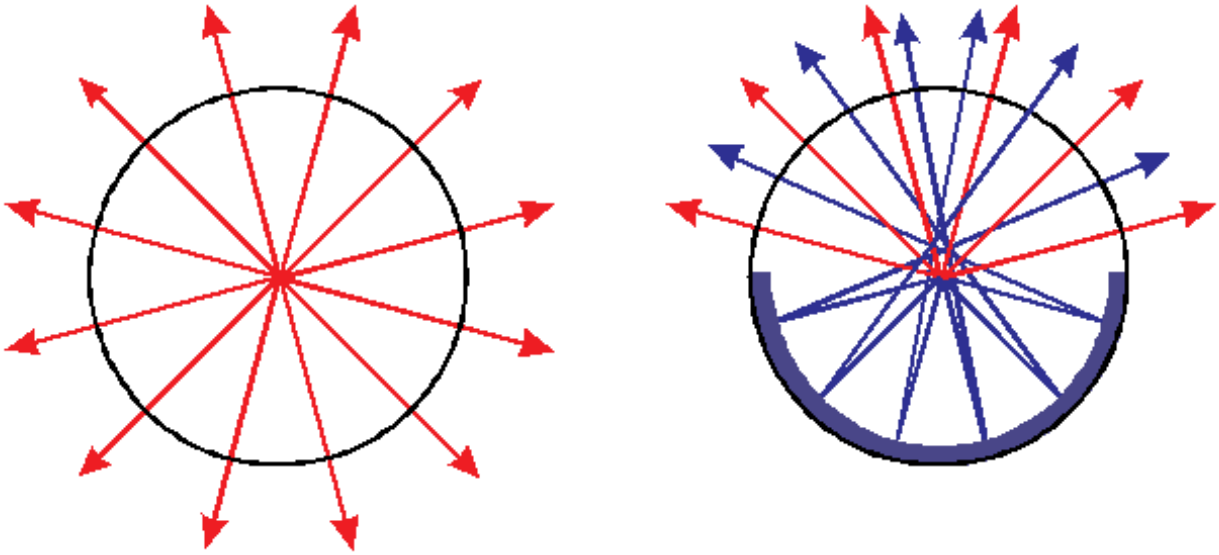



**Diagram for VHO mode**

You should always wear eye protection when using any UV device to prevent eye damage. You MUST jump both pins of this lamp at the lamp holder when using either an electronic ballast or a high frequency electronic ballast (such as the SunHorse) or you will cut the lamp life by as much as 50%.

*Side/cut view of a regular lamp (left) and a RUVA lamp (right) showing how the light transmission is directed toward one side of the lamp.*



The ClearTech 120R is a RUVA lamp (Reflector UltraViolet A). This means that an opaque, reflective coating has been applied during the manufacturing process. This forces all the light to exit the lamp in one direction. The above diagram demonstrates this by comparing a regular lamp (left) to a reflector lamp (right). The end result is 30% more UV output when an internal reflector is used. The lamp should always be mounted in a way that the label on the lamp faces the direction you want the UV to be transmitted to.

**SunMaster®**
**CLEARTECH 120R**

All ClearTech lamps (including the ClearTech 120R) use a different, patented glass that permits higher UV transmission, particularly in the 250nm to 320nm (UVB) range. It is certified to operate with 120W of power, and can be run with as little as 70W of power using electronic ballasts. Most are T12 (1.5 inches in diameter) and come in a variety of sizes and wattages.

Other ClearTech lamps (and ballast combinations) are possible for other special applications. Call 1-800-274-1744 x126 for technical assistance on special UV applications.

**To reorder the SunMaster ClearTech 120R, you can call SunMaster direct at 1-800-274-1744 or purchase online at www.TanningLamps4Less.com. These are the only authorized outlets for SunMaster lamps.**