

## Night Vision Suggestions from Empire

Seeing well at night presents a different set of optical problems than seeing during the daytime. You can not see as well due to a lack of light, and sources of light often seem to have a great deal of glare.

Strategies for better night vision include:

- 1. Do not put much tint in your lenses. You don't need to block out more of the limited amount of light.
  - Often photogray lenses, which turn dark to become sunglasses in sunlight, do not lighten up enough at night for many people to see clearly. You may need a clear pair of glasses for night driving if you want to stay with photogray lenses.
  - Never wear sunglasses at night in order to cut down on glare from light sources; your lenses will allow so little light through that a dangerous situation is created for driving.
- 2. Have an anti-reflective coating put on your lenses. Ordinarily 8% of light striking your glasses is reflected back away from your eyes. An anti-reflective coating allows this light to pass through the lens and enter your eye.
  - Your car windshield reflects back around 8% of the light, a tint in your windshild can absorb 4% of the light, and your own glasses can reflect back 8% of the light for a total of a 20% light loss in an already dark environment. An anti-reflective coating gives an increase of 8% of the light reaching your eyes.
  - Much of the glare from lights at night comes from reflections internal to your lenses. You can see more of a starburst effect or also ghost images due to this internal reflection. An anti-reflective coating greatly reduces this effect.
- 3. Protect your eyes during daylight hours from too much bright sunlight. Various chemicals in the eye that aid in night vision can be used up in adjusting to bright sunlight. Your body will regenerate those chemicals overnight, but your body may not regenerate enough to help you until after bedtime. Sunglasses worn in bright sunlight are often a help for night vision.
- 4. Keep your glasses and windshield as clean as possible. This will help minimize the starburst and haze effects around lights.

