



Why Do I Need Projector Maintenance?

The infrared energy released by your projector's lamp deteriorates the optical coatings that ultimately create the colors in your projected image. Dust in the light path has a direct effect on the image color, as well as the indirect effect of retaining heat against the LCD's and polarizers, thereby shortening their life.

A dirty projector first shows itself as a magenta colored cloudiness in what should be a white background. If your lens has enough focal range, you can shift the focus away from the front of the prism (your projected image) back to the surface of the LCD's themselves. The actual particles of dust can then be seen, and their location can be determined by their color. Magenta specs are contamination on the green LCD, yellow ones are on the blue LCD, and blue ones are on the red LCD. The magenta color shows most to the human eye due to our eyes being most sensitive to green light.

Effective cleaning of these surfaces cannot be done without opening the projector, and should not be done by persons who are not trained to handle them, as they are easily damaged.

The Effects of Dust and Other Contaminants in the Projector:

- 1) The intake filter; Dust reduces the airflow and defeats the cooling fan, speeding the aging of optical components.
- 2) The LCD's and Polarizers; Contaminants block light in a single color channel, changing the color output by the projector, resulting mostly in magenta clouds in your image. Long term exposure to these optical elements will result in permanent discoloration that is usually too expensive to repair.
- 3) The rear of the projection lens; Dust accumulating here will result in a brownish-yellow hue in the projected image.
- 4) The remainder of the projector light path, including the lamp itself; As dust builds up in these areas, overall brightness and image contrast ratio are reduced, producing a dull unfocused looking image.

The CCS Service Department can help you protect your investment. We are a factory authorized warranty repair center for NEC, Epson, InFocus, Panasonic, Toshiba, and Mitsubishi projectors. We are also a warranty service center for NEC, Panasonic, LG, and Samsung commercial LCD and Plasma displays. Call us for a quote, you can bring it in or we can come to you.